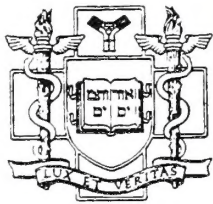


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Contents:

1. Oberly, Aaron Shimer d. 1919
2. Woodward, Edward Prindle d. 1904
Bound out of sequence: leaf 74 a blank precede leaves 1-6.
3. Williams, John Burns d. 1860
Bound out of sequence: leaves 7-10 precede leaves 1-6.
4. Welch, John Benjamin d. 1862
5. Hubbard, Charles Henry d. 1908
6. Hall, Nelson Gregory d. 1919
7. Brush, Platte Edward d. 1896
Bound in a bizarre sequence starting with leaf 21;
ending with 1-6
8. Bissell, Evelyn Lyman d. 1905
9. Bishop, Timothy Huggins d. 1906
10. Benedict, Abel Carter d. 1898.
bound incorrectly - in sequence 12-17, 6-11, one blank, 1-5.
11. Barker, John William d. 1907
12. Ainey, David Carlisle, d. 1908
13. Alling, Lewis Henry d. 1864.
Hernia. bound out of sequence Leaves 25-30 at front, 1-6 at end.



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Ch. S. Oberly

July 25th. 1860.



Archives

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turn in reorganization.

The earth's revolution on her axis accomplishes similar changes it determines our time of activity and rest, it influences our organism her yearly revolution around the sun works still greater changes, it regulates our seasons affecting life and organization, directing all to act in harmonious concert to the thermometric and calorific rays of our central luminary. It causes our plants to awake from their slumber in spring to swell their buds, expand their leaves to undergo the process of assimilation and to adorn nature with beautiful flowers; while by the same agents it strips them again for their winter repose, both, the result of similar causes differing merely in degree.

Why is it that hibernating animals seek a retreat in the hollow of trees and there remain secluded till the genial warmth of spring calls them forth once more? Why is it that birds keep changing climate

during spring and fall, propagating their species here and then return! Why is it that fishes migrate in spring from their oceanic beds to smaller streams, to deposit their spawn and on the approaching fall return from whence they came! Are not all these influenced by astronomical events are not their changes similar in the general to the changes effected by the earths daily rotation, are they not similar to the daily wake and sleep so essential to organization and life. These events to the medical practitioner are no less observable, they are written on the constitution of man.

Each season has peculiarities of its own; our autumnal miasmatic fevers are almost unknown at any other period.

Scrofulous diseases as well as the exanthemata are greatly influenced thereby, while spring with its changes brings pain and distress to the afflicted rheumatic.

Thus a general law is established and a

Tendency to a positive science shown. Altho' general in knowledge at present may we carry it out in its details and establish truth while by so doing we shall be able to remove those quibbles by which irregular practices are sustained.

other unceasingly, shortening and lengthening of days, equinoctial storms, the sultry heat of summer, and frigidity of winter, all of which changes have a greater or less influence, and are essentials to our present condition. This idea extended we observe in the vegetable kingdom; some plants coming forth in spring but wither and die at the approaching fall. Others of greater endurance and longevity smile on the advancement of civilization, yet they are included in this law of variation. In the earth's configuration we also observe a continual change, hills and valleys are under the continual influence of physical agents. The uneven surface is continually forming a level, the detritus of rocks the product of atmospheric, glacial and fluvial influence is continually levelling the wrinkles on the earth's surface giving fertile soils for the growth of plants and the propagation and improvement of species.

Life and death which to the ignorant are separate are viewed by the chemist and physiologist as one, continually combined in the same individual. This decay of an organized being is a constant event commencing with life and continuing after death. The physical exertion or mental attention in directing this pen is continually breaking down atoms which are to be removed from the body by transpiration of the skin, exhalation from the lungs or through some of the other excretories, while an equal portion of plasma is required to repair the loss. Eight hundred pounds of oxygen is required yearly to oxidise the tissues and keep them in repair.

Plants and animals are more or less dependent on each other. The former alone through physical agents are capable of converting inorganic or mineral matter into the organized individual, appropriating the effete atoms of animal exhalation to their

growth and without which they cannot flourish. On the other hand animals subsist on vegetables, giving in return carbonic acid, the primum of life to plants. This destructive process though constant it has its life regulations and after death the avenues for the conduction of effete atoms are closed and the mechanism appointed for that purpose is demolished. Thus time forms a part in animal life; beings in a few years pass away and during their life long period they are undergoing continual change. Carbon is constantly escaping from the system broken down as it is from the tissues by action, and this is directly related to the amount of exertion and the quantity of combustible material taken in as food. This breaking down of atoms or cells is at its maximum in the higher order of beings, those in greatest activity undergoing the most rapid change. At night when rest of the body is observed this destruction of cells is at its minimum, respiration is then

diminished, heat is reduced, and the transmutations checked

In the earth's formation physical forces have been at work at varied intervals, as is geologically shown by the sudden extermination of species, enabling the geologist to classify and arrange the formation into numerous epochs and periods. Most recent in date we find the mammalian tribe undergoing the same change. The mastodon once grazing on our american forests have disappeared, leaving their bones entombed with species of animals still in existence. Nor does this extinction of races belong to the unintelligent orders alone, it is found in our own records of history. The indians once roaming over this country are gradually becoming exterminated, their present home being in the far west and as the tide of civilization advances they are confined to smaller limits; gradually to die, with the wild animals of their domain. From the earliest period of organization there has been this law

of progress. The civilized man of to day is a wholly different individual from the man that lived a thousand years ago, while his condition in life is similarly changed.

Knowledge is ever in progress and advancing to perfection, requiring all to join the accompanying march or suffer the fate of death.

The thermometric range to which man can accommodate himself is limited. Since water which enters so freely as an ingredient into all organized tissues has an interval only of 180° between the boiling and freezing point while by these external conditions individual races are determined. The esquimaux of the north confined to his snow huts leading a barbarous life, while the inhabitants of the torrid zone are equally lazy and unintelligent. The intervening latitudes alone afford opportunity for man to elevate himself above the animals with which he is surrounded. It is only where physical circumstances conspire that a full development

of the reasoning faculty is acquired. Thus we perceive that the sun is the great life giver whose movements are accomplished by mechanical laws.

The carbonaceous matter circulating through our system as blood is transferred by respiration to the air aiding the growth of vegetation in forming its leaves, trunks and colored flowers.

The coal consumed in our furnaces is the vegetation of former ages buried in the earth for our welfare and enjoyment; in it we find the result of physical agents such as light, heat &c which have been absorbed and rendered latent. From the foregoing considerations we observe the atmosphere to be the reservoir from which all living ^{beings} spring and unto which they all return — in it we find atoms coming from all the varied sources, such as participated in pleasure or pain of others which beautified nature by their lovely forms: each performing its part and then returning to their general recipient to await their

The influence of physical agents on organization and life.

The progress of natural history, and the improvement in chemical analysis, affords us means of interpreting the works of nature, to discover their relation; the laws by which they are regulated, and their bearing on organization and life.

Viewed philosophically it belonged to the 17th. century to discover the law of universal gravitation, to assign causes for the motion of the heavenly bodies, and to establish the doctrines of astronomy. To the 18th. century belonged the discovery of the relation or reaction of atoms, or the kindred sciences of physics and chemistry. While to the 19th. century remains

the application of the sciences and the important function they perform in the complicated structure of life.

Anterior to scientific knowledge, or before the application of the sciences, physiology for want of proper investigation advanced little or none, but remained as little else than an incredible narrative of a substitution of fictions for facts adhering to the vital force as an independent, homogeneous principle playing the only part in life uninfluenced by physical agents. But a principle like this is nowhere found in nature.

If we look to the solar system we find immutable laws concerned to bring about certain effects. The moon revolves in her predestined course exhibiting her phases from time to time. The comet, the pendulum of the universe swings punctually past the sun completing its hyperbolic orbit, and then receding into the immensity of space to welcome other suns. The moving and

revolving orbs are all obedient to the same law, involving immutable principles, and indicating a common law incessantly in action. In the history of the human race epochs have occurred with a similar degree of periodicity standing in relationship with, or even bringing about the condition of modern civilization. As in our daily life there is no incident which is not in connection with preceding circumstances, we naturally view the changes of our existence as bearing the relation of cause and effect.

If we turn our attention to the human body we find physical principles involved in construction; the bony skeleton on well known mechanical; the eye on optical; and the circulation of the blood on the hydraulic action of the valves of the heart.

The investigations of the present century inform us that living structures are not the product of one homogeneous power but rather a resultant action of numerous forces.

Life in the organic world is influenced by physical agents; as the magnetic needle by the inductive influence of magnetism. Gravity, cohesion, elasticity and all powers operating on masses and atoms play an important part in the evolution of every living form, and on them they are dependent for growth. Thus where in our investigations have been extended aright, the unknown has acceded to the known, while much remaining yet unknown is so for want of proper means of investigation.

In the farther consideration of this subject the vegetable will be included with the animal, for the two are so closely allied that the one cannot be spoken of without dealing with the other, and also because the influence of physical agents are more obviously seen in the vegetable than the animal. Thus wherever the light of the sun gains access, organized beings or organized bodies spring up, whether in the atmosphere, on the surface of the earth,

or in water; while there they are influenced by periodical vicissitudes, as observed in plants and animals. For no sooner does the sun sink below the horizon than rest ensues, and activity ceases. In the plant the carbonic acid taken in by the spongiolles is exhaled as such, instead of decomposing the gas fixing the carbon and liberating the oxygen. Many plants too at the approaching eve close their flowers and curl their leaves for the night to be vivified ^{by sun} the following day. This same period of repose is observed by animals, except such as seek their prey by night.

Thus light is essential to life and its continuation, for animals as well as plants without its agency sicken and die. In decaying organic solutions animalcules will not appear nor is the tadpole metamorphosed into a frog without its presence. Thus light is life and darkness death.

In the earlier formations of the earth we find that physical agents have performed a

no less important office than they do at the present time. They have on this encrusted star developed changes of advancement, extinguished the life of one generation as a new one appeared. To the chance observer the extremes bear no resemblance as the trilobite of the primary fossiliferous rocks and man of most recent formation, but to the naturalist their alliance of construction resemble each other so much that he pronounces them to have sprung from the same intelligent mind. As in mathematics we have a continuous series each term bearing a definite relation to the one preceding, so in the construction of life all are built on a common plan in which there is a unity of design.

In the planetary system we see fixed events from apparently variable causes, as the changes of the moon, solar eclipses, visits of comets, and on our own earth we observe the change of seasons, the oceanic tides following each



him in the open air; and this change of
employment may of itself arrest the disease.
The diet should be nourishing; ^{and} there is an
insufficient quantity of oily nutriment taken
by most phthisical patients. They are generally
averse to its use when in health. Cod Liver
Oil is one of the best remedies in this dis-
ease. It should be given as soon as ~~there~~ is any
evidence of the existence of tubercles in the lungs
and it may also be of service if its use
is delayed until a somewhat advanced period
of the disease. Iodine and its compounds have
been used with asserted advantage, from its
supposed efficacy in scrofula: spiritum or some
of its preparations are useful to allay
cough and restlessness, which are present in
this disease.

From 7/27/85
to Woodward



Gentlemen

The subject which I have selected as the theme of this dissertation is that of Phthisis. It is unnecessary for me to say that I do not expect to advance any new theory in regard to the nature of this disease, or to bring before you any symptoms which you have not noticed in scores of instances, neither to mention remedies and modes of administration which you have not employed, but merely to bring before you in as concise a manner as possible, that knowledge of the subject which I have obtained by carefully reading the standard authors who treat upon this formidable malady. With these preliminary remarks I proceed at once to the consideration of my subject -

The word Phthisis means a wasting away or consuming. The general symptoms of this disease are Cough, dyspnea, expectoration, hemoptysis, wasting, hectic fever, hoarseness or loss of voice and diarrhea



The appearance of tubercles as they are found in the lungs. Tubercles as they are found in the lungs vary very much in size. They may be no larger than a pins head or they may be as large as a walnut, or they may be much larger. The tubercles are composed of unorganized matter of a yellowish color, and are stated by authors to be about the consistence of cheese. When a particle of matter is deposited it is liable to increase by continual deposition of fresh tubercular matter. After the tubercular matter has assumed the solid form it cannot undergo any change except through the agency of the parts around and in contact with it. Besides the true tubercle we often find another variety called miliary tubercle, They may both exist in the same lung, and at the same time, and frequently this is the case.

As regards the manner in which tubercles soften there is a difference of opinion. Some believing that they commence to soften in the center, and others that they do not.

I think as a general thing they do not commence to soften in the center.

A tubercular mass may be formed by the coalescing of several small tubercles, and thus, ^{the} tissues are compressed between them; and form a part of the mass. These take on inflammation ~~that go~~ and suppurate, thus giving the tubercle the appearance of commencing to soften in the center. After the tubercular matter has softened and been expectorated a cavity is left as the result.

The tubercular matter is deposited from the blood upon the inner lining of the air cells and of the bronchial tubes communicating with them. When tubercles affect the lungs they are not deposited at random, nor indifferently in all parts of the lung. It is in the upper lobes and the upper and back part of these lobes, that, in nineteen cases out of twenty ~~that~~ we meet with them when they are few, ^{and} it is there that they are the largest and most numerous when they are scattered

throughout the whole lung. It is here also that they begin to soften and that the cavities are the largest. Tubercular cavities vary greatly in size; they may be no larger than a pea, or they may be large enough to contain a pint or more of fluid. The whole lobe may be converted into a sack of this kind. There is always one, and sometimes more bronchial tubes enters these cavities. When a cavity has formed its inner surface presents a ragged appearance. Whenever a portion of lung be rendered solid by Inflammation or by the presence of tubercles in it, the ~~auscultatory~~^{to} signs will be the same. If a portion of lung be completely solidified, vesicular breathing cannot be heard, but bronchial breathing and bronchophony will be audible. Percussion will give a dull sound whether the part struck be hepatized or blocked up by tubercular matter. Large crepitation, when it is heard, depends upon the passage of air through fluid contained in the bronchi.



Gurgling respiration is produced by the passage of air through fluid contained in a tubercular cavity or dilated bronchial tube. If there is not any fluid contained in the cavity, the sound heard is different from those which have been enumerated—it is called cavernous respiration. It is a hollow sound. Sometimes pectoriloquy may be heard by applying the ear to the chest and causing the patient to speak. Cough is generally the first thing that attracts the patient's attention in this disease; it is usually slight at first, and dry, and by degrees it begins to be more troublesome and is attended with some expectoration of mucus. Hemoptysis is usually one of the first symptoms of phthisis; it is the consequence and ^{not} the cause of the disease. Dyspnea is ~~not~~ a very important symptom.

Generally it does not become very urgent until near the termination of the disease and not always then. If ~~you~~ ^{we} watch a person that has phthisis ~~you~~ ^{we} ~~will~~ generally perceive that his

respiration is more hurried than in health. hectic fever, which is present in this disease, frequently steals upon the patient unconsciously. It is ushered in by a chill, and the perspiration is more profuse than we should expect from the amount of fever, and it is also more profuse upon the upper part of the body than the lower. Diarrhea is a bad symptom when it appears. It does not usually appear until near the termination of the disease for it rapidly wastes the patient's strength, and the disease soon terminates. Usually, also, death is preceded by some edema of the feet and ankles and sometimes of the face and hands.

Treatment. - It is my opinion that if we could see the disease in its first stage that many might be cured by the use of proper remedies. If the patient's occupation ~~is~~ be one that confines him to a close room and impure atmosphere he should seek a different employment, one that will keep

and treat the depressed portions, &c.

The symptoms of fracture of the inner table are
the same as in the other, and the treatment the same.

In the comminuted fracture if there is no wound
in the scalp, no incision should be made down
to the bone for the purpose of examining the wound
as in the other. If there is a wound, the
hair round the wound is shaved, and on
the brain they should be treated as in the other.
Dress the wound with the lightest and simplest
dressing and constant attention is necessary.

We next come to the third division of an abscess
of the scalp. It is an old maxim
in surgery that no wound of the scalp is serious
so not to require the slightest attention for a moment
but no abscess of the scalp is the least serious
if the bone is in contact with it or if it does not
rest so deep as to be the sitting place of a cystic
abscess. A good judgment must be given by

Slight injuries. The inflammation spreads very rapidly involving in a short time the whole face and ear spreading to the face often in defiance of the most active treatment.

In treating wounds of the scalp great care should be taken to cleanse the wound from all extraneous substances such as coagulated blood or anything that would act as a foreign body thereby preventing the union of the wound. The lips of the wound must be brought in contact by means of sutures or ligatures to arteries unless the hemorrhage cannot be restrained by the more simple means.

The most simple form of dressing should be used in retaining the lips of the wound in contact the common adhesive plaster with compress and bandage will generally be all the dressing that will be necessary if however the wound is large and requires the application of other dressings the compound is used. In all cases the dressing should be changed as soon as it is found to be soiled or if it causes irritation they should be changed at the first opportunity. In cases of severe lacerations the dressing should be changed frequently.

manifest the antiseptic treatment should be adopted early in most cases compression should be employed, leeches and cold applications to the head the free use of calomel followed by saline cathartics in the early stage, as soon as the patient is able to take food or a purgative should be given and the urine should be watched the contents of the bowels if left to nature it would spread widely into the system and under the influence of the purgative it would be under the action of the purgative action and after opening it pressure should be employed to prevent fresh accumulation.

Conclusions seldom require much treatment unless a large tumour may give

disagreement here these tumours outside are usually to employ means to produce absorption

they should not be opened on account of the danger of infection

the most stimulating applications of alcohol and other stimulants generally are used and calomel is used in small doses with the other and the patient is kept free of the system

The most indication in the treatment of concussion is to
not let the patient get up too soon or to move about
often this will be very likely to make matters worse but
if not mild stimuli as heat, friction &c may be applied in
almost every case and often the digestible stimulents as
alcohol and carbonate of ammonia will be required though
they are to be used with caution lest the action be carried
too far and inflammation ensue after reaction is
fully established the patient must be closely watched
for a short time in case of any further symptoms
the nurse must guard himself against overstimulation
of the cerebral functions. The symptoms of concussion
occur without external injury from the same causes
as concussion the laceration often occurs in the side of
the head & gives rise to a fracture of the skull & lacer-
ation of the brain substance with effusion of serum
or blood or formation of a blood vessel in the meninges
or in the brain substance itself. If in the cerebrum a case
of a laceration of a blood vessel will terminate in
hemiplegia or paralysis of the face & limbs.

and all these signs, always occurring, being evidence of
inflammation would be liable to error in some particular
sure that there is pressure from the rupture of some
blood vessel either in the substance of the brain or in
relation in the membranes covering the brain. If all
these symptoms point to one definite locality, and
that on the surface of the brain the probable seat of
the effusion the surgeon would be justified in removing
a portion of bone with the trephine and if the
effusion is between the dura mater and skull it
will thus escape. If the clot be not found here it will
be proper to open the dura mater if we think it beneath it
and run the risk of inflammation for if the patient is not
relieved it will certainly result in a fatal issue.

We next come to consider Injuries of the Skull
The diagnosis of which is much more satisfactory than
we have here in addition to the subjective symptoms
the physical signs are "Swelling" and "fracture" of the
of the skull is often not diagnosed and is a source of
a permanent sore that indicated by the probable occurrence
that it is a fracture of the brain.

It is a very common error to suppose that a fracture of the skull is always

from a wound in the scalp or from a wound in the head or from a wound in the neck and sometimes from blows. There is no sure sign of this injury. Bleeding from the ear is not a reliable sign. It is relied on as one of the most certain symptoms especially when associated with great cerebral disturbance. But it is not a reliable sign. The distance from the ear to the center of the skull and the central distance may vary from 1/2 inch to 1 1/2 inches. The only sign to be relied on is the distance from the ear of a serous fluid in considerable quantity in the post mortem examination show that when this occurs there is combined with fracture of the skull rupture of the membranes of the brain. The treatment is supportive and diaphoretic.

There is a depressed skull fracture which is a fracture of the skull in which the bone is depressed upon the brain. It is said that a depression fracture occurs in children which is not a fracture but a fracture of the bone. It seems to me more probable that it is an incomplete fracture at least of the inner table of the skull.

a more violent symptom being observed than the
tupine and denture but upon being examined the
denture is found to be in the position of the

denture which seldom will occur with impunity.
In depressed fracture the outer table may be in-
jured but this is rare except in the frontal sinuses.
Less rarely is the inner table depressed or fractured the
outer table remaining uninjured but possibly

the outer table is more depressed than the inner table.
This is explained by the fact that
the outer table is the weaker of the two tables
which having no support but the yielding brain is in-
jured. The outer being slightly or very rarely not at all injured
when the inner table is injured with or without injury
to the outer there is danger of compression and ex-
trusion of the brain by the spicules of bone.

If there is a wound through the scalp an ordinary laceration
and fracture may be clearly felt and sometimes inscribed
upon the scalp unless undisturbed. But if a compound
fracture exists and the distance of the depressed frac-
ture is small the object plan is to make an opening
in the scalp to the depressed fracture.

Pneumonia

History of the disease. - The lungs being a vital organ, complicated in structure, and function, and receiving the whole volume of blood contained in the body, no less than the heart, at every circulation cannot have failed to have suffered from the time disease commenced its ravages upon the human system, and next to the digestive organs they probably more frequently suffer than any other organ, while in their fatal tendency the diseases of the lungs are second to no other organ. No class of diseases are more interesting, or more important, or more deserving of consideration. Perhaps the most frequent form of disease of the lungs is Inflammation

described from the earliest records of medicine under the names of Pneumonia, Peripneumonia, Pneumonitis, and Pulmonitis, or when confined to the Parenchyma or substance of the lungs, or primarily and chiefly affects this portion of their structure, the disease may commence in two ways, either as Bronchitis, or it may originate in the vesicular structure and subsequently involve the larger tubes, the disease is usually ushered in by rigors, dyspnoea, and a dull heavy pain, beneath and around the Sternum, there is high fever, flushed face, injected conjunctiva, pain in the head, full rapid but compressible pulse. The respiration is morbidly increased, this is one of the most constant symptoms of the disease. In extreme cases

the proportionate number between the respiration and pulse is as one to two. There are three well marked and defined stages in Pneumonia in the first, or congestive, the parenchyma of the affected lung is engorged with blood, it is much heavier than natural and on being squeezed between the finger and thumb still crepitates, when a section of the lung is made a frothy serum sometimes exudes. The second stage Red Hepitization, so called from the solidity of the lung approaching that of the Liver, in this stage the lung no longer crepitates under the finger and when placed in water sinks to the bottom. The third stage is termed Suppurative The lung when cut into exudes a yellow viscid matter. The Physical Signs



of Pneumonia include those of Auscultation and Percussion. In the congested stage on Percussion there is slight dullness. Auscultation reveals an unusual loudness and roughness of the Vesicular Murmur, similar to that caused by rubbing between the finger and thumb a lock of hair. This is called the Crepitant Rhoncus and is heard at the commencement of Inspiration and at the end of Expiration, and is considered Pathognomonic of ^{the} first stage. The signs of the ~~second~~ stage are more Pathognomonic of the disease, on Percussion there is complete dullness. Auscultation reveals Bronchial Respiration and Bronchophony. The signs of the ~~second~~ stage are not so characteristic of the disease. The Percussion is flat. Auscultation

detects the Bronchial Respiration,
and Bronchophony. The Complic-
ations of Pneumonia, are Bronchitis
Pleuro. Pneumonia, and Typhoid
Pneumonia. Bronchitis is the most
common Complication, when there
is Bronchitis, there is, if the Bronchi-
al secretion is considerable the noise
of Rhonchi, which masks the Physi-
cal signs of Pneumonia, but on listen-
ing at the end of Inspiration, on the
posterior and inferior regions of the
chest fine crepitation may generally
be heard, if Pneumonia is present.
In Pleuro. Pneumonia the disease
extends to the Pleura causing an effu-
sion of serum, at first there is cre-
pitation, whilst the dullness on Per-
cussion is much more marked
than in Pneumonia, at least in the
lower parts of the affected side.
Typhoid Pneumonia is a disease

in which the imperfect aeration of blood is remarkably prominent, the pain in the chest is less severe and is more often absent altogether, while the sense of stricture and dyspnoea are urgent. The color of the cheek is at first of a deep and vivid red, as the disease advances it becomes of a purple tinge and at length is quite black. When Pneumonia is to terminate favourably it is often characterized by some critical evacuation such as the perspiration, a latitious deposit in the urine, the cough becomes less, the expectoration less viscid, and the skin becomes cool, and moist. The Causes of Pneumonia. Long continued exposure to cold, violent exertion disease of the Heart and Bronchitis, Exposure to cold is the most common cause. The Prognosis of Pneumonia is variable, in

ordinary Pneumonia the Prognosis is favourable, when it is complicated with an affection of the Brain or Liver, then it is unfavourable, also when occurring in very old persons. The Duration of Pneumonia is on an average about ten days. The Treatment of Pneumonia is that of ordinary inflammation, hence bleeding is the most efficient remedy and should be practised freely at the beginning of the disorder, in plethoric individuals a very large bleeding pursued to the verge on Syncope is strongly recommended, often the effect previously produced by general bleeding can be continued by local bleeding, after bleeding other remedies are to be used for the purpose of counteracting the inflammatory irritation, of these the most important are Tartarized Antimony and Mercury. When a portion of the lung

remains in the first or second stage of inflammation, but the greater part of it has passed into the third stage, then local bleeding seems to get rid of the remaining inflammation with less exhaustion of strength. Tartarized Antimony should be given at first in small doses gradually increased. In the second stage Calomel in combination with Opium should be given, together with expectorating mixtures. At the beginning of the third stage Blisters are useful, together with Stimulants and Expectorating Mixtures. ^{recommended} Leucine, Bark or Sulphate of Quinine in large doses of gangrene of the lungs. In Pleuro-Pneumonia a full dose of Opium after a large bleeding is recommended by the late Dr Armstrong, Blisters are of service after the acute form of the disease has passed. Typhoid Pneumonia requires ^{carefully} treatment consid-

modified

Bloodletting is its hour and has very little influence on the disease. Dry cupping on the chest is considered of advantage. Blisters and Sinapisms may give relief in slight cases, but their effect is limited where the whole posterior part of the lung is involved.

John B. Welch



Mental Influence in Disease

The importance of the theme, rather than proportionate ability, on the part of the writer, may be an apology for its presentation at this time. — It does not detract from the practical interest of the subject, that it is so frequently ignored in life professional, by many, who, while theoretically acknowledging the just claims which the matter should have upon the consideration of the careful observer, neglect to give it due weight in Diagnosis and Treatment?

Truly to appreciate the import of the oft quoted phrase, "Sana Mens in Sano Corpore", a glance at the mental and corporeal elements, existing in man, may be worthy of a moment's attention; — for, as in complex Mechanisms, the perfection of the whole, with an intimate knowledge thereof, the relations and mutual dependance of component parts, is attainable only by careful

research and examinations

Sensation, thought and volition are commonly considered, ^{the} distinctive characteristics, as well as the constituents of mental organization - so subtle in its manifestations - and ⁱⁿ its relations to the corporal, so recondite, as greatly to mystify ardent physiologists and profound metaphysicians - Enough at present is it for us to know, that the connecting link (as it were) between mind and matter is the nervous fibre, delicate in its construction, with complete adaptation, to the functions which it performs - An afferent system of nerves bears impressions from without inward - An efferent system transmits ^{the} sensations from the centre to the periphery - The action of the former inducing impressions, which are made evident through the other, upon the muscular or true motor fibre.

The body is so constituted, as to respond promptly to the influences which come to it, from the mind. - Every organ or system of organs looks, to some extent, in this direction,

as the governing power in the performance of its appropriate functions; for though functional activity may be immediately referred to nervous influence, not depending directly upon mental action - or certain organs may be adduced which seem to act independently of all such impressions, upon minute investigation, an indirect mental influence will be discovered, whose power cannot be ignored. -

These relations are, to a certain degree, mutual. While it is essential, to a proper performance, of many of the corporeal functions, that the mind should be in a healthy condition, oftentimes, it is equally important, to mental vigor, that the bodily powers be entire, performing well their appropriate duties. - Proof is needless in confirmation of the assertion, - the experience of every observant physician being undoubtably adducible, if necessary.

Here then, is discovered the full meaning of the quotation above mentioned - since a "sound mind" can only exist in a "sound body", when

the normal relations of the one to the other are duly observed, and the appropriate functions of each suitably performed.

It is merely the purpose, in the brief time allotted, to notice a few of the various ways, in which these relations may be deranged - the effects resulting therefrom - with the general principles of treatment appropriate thereto - and at best, the outline will be imperfect, as ^{it} must of necessity be, the subject being important & the powers of the writer ill proportioned. The subject has, moreover, many ramifications, each interesting & worthy of consideration in itself - yet an attempt will only be made, to consider briefly a few of the minor, yet important morbid conditions, daily brought to the notice of the medical man, referable directly or indirectly (with respect to their termination) to the mental influence exerted - the condition of the same, and the particular physical diathesis existing.

To certainly or easily determine the nature and extent of these derangements, as

well as the appropriate treatment in the premises, is a matter sometimes impossible, often extremely difficult - always requiring careful investigation and discrimination.

Certain organs closely sympathize with peculiar mental actions or diatheses - therefore any disorder thus existing, is liable to make speedy impression upon one or more of these structures. - There exists, through nervous agency, a close intimacy between the mind and the organs of circulation - blushing - the activity of erectile tissue - being but in evidence of the fact. Thus, morbid imaginations may induce arrangements in physical structure, apparently serious in their nature - undoubtedly so, if the conditions giving rise thereto, are long maintained. - A young man came into the office of a medical friend, a short time since, expressing great incommence from a so called "palpitation of the heart" - On examination, no evidence of organic lesion or serious functional arrangement could be discovered.



nor was it until inquiry into the private habits of the patient, was instituted, that the existing derangement was fully appreciated or appropriate treatment recommended. - The latter consisted in the suitable employment of general tonic remedies - while chiefly, attention was directed to the mental manifestation, the patient being urged to withdraw his mind from all consideration of a debasing and sensual character - and engage his thoughts upon matters of higher import and ennobling tendency - nor was the prescription found inefficient, in the least degree.

Sudden and powerful impressions made upon the mind, exert an influence upon the circulation (especially if from any cause, this has been deranged,) increasing action - this sometimes becoming intolerable and even dangerous - or, from a similar reason, the heart's action may be temporarily interrupted - or, in other cases, syncope may be induced through mental influence -

In all these cases, the action of the mind is to be duly considered - & treatment calculated to render it less obnoxious to deleterious impressions, not forgotten.

The power of mental influence is strikingly manifest in that protuberant and too frequent ail, Dyspepsia - Often, is it difficult, to determine with certainty, which exerts the greater influence in rendering the unfortunate sufferer miserable, mental disorder, or disarrangement of the digestive organs, which the cause and which the consequence of all the misery existing - or to which particularly, treatment should be applied - Under certain circumstances both require attention - and that as varied as are the morbid conditions existing. The same combatting weapons cannot perhaps be used in any two cases - While frequently, by sad & perplexing experiences, the physician realizes the power of the mental over the corporal, so often does he find this relation existing, in the disease under consideration.

For is it, oftentimes, until having intermitted
the administration of medicine - and substituting
a course of "moral treatment" - that any
desired result is attained, or good wrought.

Pictures from real life may be drawn,
demonstrating forcibly the misery of the con-
fined Dyspeptic - somewhat diseased perhaps
corporally - far more diseased, mentally;
morose, disheartened - hypochondriacal, with
an imagination perfectly inquisitorial, and an
existence rendered distressing, by a thousand
forebodings of evil - Should we doubt the pow-
er of the agent - or the result, that influence
being long exerted? - and, if any treatment
could be successful, would it not intimately
be related to ^{the} morbid condition of the mental
organization; - rousing it from its ill directed
efforts, & turning its powers in a healthy
and appropriate direction? - not neglecting
the claims of the physical structure - but bal-
ancing, and adjusting, as far as possible, the
conditions and relations of the one to the other.

Though too much time already has been devoted to this point, I cannot refrain from introducing, the course of treatment, adopted by one of the ablest and most respected physicians of our State, and for many years an honor to this School, in the Chair of Materia Medica, - since it seems well to illustrate the principles, which it has been my aim to express.

The patient, a man in the prime of life, long a victim to Dyspepsia - called upon the Dr. who, upon examination, found him possessed of many of the characteristics above indicated, and for all appearances, beyond the reach of simple Medication - He prescribed immediately, horseback exercise, and that, in his own society - and by skillfully, yet gradually withdrawing his mind from a constant fixation upon himself & his complaints, to works of nature and ^a suitable literature, had the pleasure of seeing his patient, in due time restored to soundness.

Hysteria, a source of no little perplexity, and in its manifold manifestations, often exceedingly difficult of diagnosis or treatment. (Simulating as it does, almost every disease to which "flesh is heir"), yet, at times, affords fine opportunity for highly successful and satisfactory treatment. Strong impressions made upon the mind, have more than once been found efficient, after long months of fruitless medication.

In fact, but little can be accomplished, until the mental forces are brought somewhat under control - and then, the deranged nervous system, subject to it.

In a certain class of diseases, attended with excitement of the nervous system, medicine is frequently found sufficient, until treatment is particularly directed to the mind: fears allayed - doubts removed - and the heart inspired by the hope of ultimate recovery.

The writer has observed more than one case, where after long and fruitless medication,

a few plain and judicious remarks from the physician, have been found for good, conducing directly to the permanent improvement of the patient.

Certain mental states may interfere with the efforts of nature to bring about certain ends. As in parturition, an irritable, fretful or disponding condition of mind, may often retard, if not absolutely check the progress of the labor, - when perhaps, a cheering word or an encouraging exhortation, from the attending physician, may prove, combined with judicious management, of wonderful benefit.

Surgeons frequently find in practice, that the proper reparative processes of nature (as after Wounds and Bruises, or various lesions of Structure) are retarded by circumstances referable to mental action - nor is it until these influences are counteracted, that the process of cure is reestablished.

The reduction of dislocations - restoring of Hernial protrusions - replacing of fractured parts. the endurance of an operation - & subsequent resto.

ration to soundness, depend, in various respects and under varied circumstances, upon mental influences. - Singular cases are reported, in which impressions, so speedy & effective, were made through the mind, as to benefit and even ultimately cure. Chronic disorders of long standing; and upon this principle we may generally account for wondrous cures, published to the astonished world, through the agency of nostrums & nostrum vendors, irregular practitioners of every species - as well as the success attributed to Homeopathy - Thomsonianism - Hydropathy - Eclecticism - Cancer Doctors. Bone Setters & all the rest of this genus - whose fortune depends, upon the unbounded confidence, which they induce, in their powers to cure, rather than the least real efficacy in treatment or correct knowledge of the Healing Art.

In the preceding paragraphs, instances of more frequent occurrence in life professional have been selected, and even these, through want of time have not received merited consideration.

As allusion has been made to grave and more unfortunate conditions of the general system, closely connected with disease long existing in the mind. Insanity - Idiocy in various forms, exhibit but too clearly, the frequent inability of all agencies, - in restoration to soundness, when disease is firmly fixed in the mental organism.

From these few considerations, it is believed that a practical truth may be deduced of especial value to the young practitioner, - which is, the importance of learning early & carefully to discriminate the power of mental influence.

There is reason to believe, that a frequent cause of success - or failure in the practice of medicine, is inability, it may be, to estimate properly physical signs - equal inability, to interpret mental states & manifestations. — The Physician's work is truly a noble one - and great, may be his influence for good, when, with judicious & skillful administration of physical remedial agents, he is able to combine power to influence the mind, control & suitably direct its action, & in the varied experience of his professional career, like our Master, the Physician has a blessing

Of the Mind physiologically & psychically considered—
" " " " " "

The superiority of the Human Mind over that even of the highest development among the lower orders of animals is obvious. This arises not only from the fact of the far greater variety & scope of his faculties, but still more from that dominant power of the Will which gives him the ability to use them for the accomplishment of the highest amount of good. For it is evident, that so far as the directions of his thought & desires & feelings are the effect merely of the action of impressions external to him, made upon an organization having certain responses & tendencies so far he must be considered as irresponsible for his actions for thus his character is formed for not by him. But on the other hand so far as he is able to exert a Volitional power of directing his thought & controlling his emotions, he may rise superior to cir-

circumstances, may use to the best account
the Intellectual faculties with which he may
be endowed.
Also bring his Moral character nearer
& nearer that high standard which his Na-
ture may be able to attain unto in his
present sphere of existence. And here we
cannot but observe the broad distinction
between man & the lower animals. In
many of the lower orders of animal exis-
tence we indeed see evidence of rationality;
we see in them the manifestations display-
ed by them of their emotions. But we
do not see, nor have we reason to believe
they have any such controlling power as
is possessed by man in the Will. But
on the contrary all observation would
seem indeed to lead us to an opposite con-
clusion. For we perceive them to be en-
tirely under the power of the ideas & e-
motions which for the time possess them
& also that by no act of the Will however
strong have they the power to keep them

in subjugation or by any voluntary effort
to turn their attention into another chan-
nel. We perceive in this a striking resem-
blance between their condition & that of
the Somnambulist, the Dreamer or In-
sane Person: - from the fact that in all
of whom this voluntary control is suspended
& who may be so influenced by the sug-
gestion of ideas that by a proper stimulus
any action in its nature respondent which
is in accordance with the habitual states
of the individual may be called forth. We
see precisely the same thing in animals
which are trained to the execution of cer-
tain rounds of movements. These are
performed it is evident in response
to certain prompts conveyed to them
through their sensibility. In the Human
species we see very intermediate grad-
ation from an entire want of possession
to that of a perfect controlling power
of the Will. On the one hand there are

found those who from an extreme weakness of their wills are so much accustomed to act upon the promptings of trivial impulses who seldom act otherwise than from mere impulse that they can scarcely be said to be voluntary agents, or those who permit certain ruling ideas or habitual feelings to obtain such a power over them as that they take the place of the Will or exercise that controlling power which the Will alone ought to exert. While on the other hand we see a few noble examples of what a determined Will acting in a right direction can effect. Of these two classes we have two striking illustrations in the lives of those two distinguished men Coleridge & Southey. Of the former it is said his whole course of life was one continued proof of the weakness of his Will, for with numerous gigantic projects continually in his mind he could never

bring himself even seriously to attempt
to execute any one of them; & his utter de-
ficiency in self-control rendered it neces-
sary for his ~~own~~ welfare that he should
yield himself to the control of others.
On the other hand we have in the life
& literary career of Southey, a fine ex-
ample of what a determined Will
acting under a strong sense of duty
may do in utilizing & turning to the
best account ~~and~~ ^{the} ~~advantage~~ ^{of} a com-
paratively middling order. In child-
ren especially this gradation may be
easily seen. How important that
the leading object in their education
should be the development of this
power of self-control. —

Having surveyed those points that so
clearly distinguish man from the
lower orders of animals or rather
that ^{or} chiefly that grand & broad dis-
tinction the dominant power of

the Will: we now pass to the true functions
of the Cerebrum of the Brain of Man.
In regard to its general functions we have
evidence from an examination of its com-
parative development both in Man & in
the animals that it is the seat of Intelli-
gence. In those races of animals most
distinguished for their educability & in-
telligence we find it the most developed
Also in man those who have obtained
the most influence over the understand-
ings of others, men of deep thoughts & strong
reason of determined Will have always
been large-brained persons: those whose
emotional tendencies have been held
in subjection to the reason & the Will
& who have devoted their whole energy
to the particular objects of their pursuits
With men of genius however it is dif-
ferent. These men act rather upon
the feelings & intuitions of others than
upon their understandings. In such

the Cranium is not large. Nor in them the
scope or force of the Mind is not high -
The mere comparative size of the Cras-
trium however affords no exact measure-
ment of the amount of mental force -
but *extens foribus* it does. —

The considerations of that mysterious
connection & or those relations of the op-
erations of the Mind itself to those of
the bodily Organism, well demand
our attention. — " — "

And here the first thing that presents
itself is the long continued & of re-
peated controversies; supported on the
one hand by the advocates of the Ma-
terialists & on the other by those of the
Spiritualists hypotheses; controversies
so preposterous as to remind us of a fable
we have somewhere read of a mortal
contest which was carried on by two
knights about the material of a shield
which they saw from opposite sides.

the one maintained it to be made of gold
the other of silver, each of course proving
himself to be right respecting the half
seen by himself. It is thus the Brain
& the Mind & its connections have
been studied. By the older ~~methods~~
research. Metaphysicians studied
it wholly without reference to its ma-
terial instrument; whilst the Brain
has been most carefully dissected by
Anatomists & most scrutinizingly
analyzed by Chemists as if they expect-
ed to actually see thoughts & analyze emo-
tions as a Chemist would analyze air
or water. But they are so closely bound-
ed in their actions that the way to gain
true & valuable information is to
seek for it at the points of contact -
By not pursuing this course hence
the contest. — The doc-
trine of the Materialist in a word
is that which reduces man to a "thing"

my machine. His arguments are found
in that whole series of phenomena -
which so clearly mark the influence
of the body on the Mind & physical
on psychical states. The doctrine of
the Dualists is in a word that
which makes man to consist as it were
two separate existences viz the Mind
outside of the body & a separate immat-
erial existence & of that lower part of our
~~material nature~~ ~~which~~ operates on
the body & is in its turn affected through
it. In this is involved a most pernicious
error. It is inconsistent with the whole
theory & practice of Education. For right
training always requires external im-
pressions as having a most valuable part in
the formation of character. For so long
as this self directing power is not ac-
quired so long the character is what it
is merely by nature & so long too the
character of the individual is formed

for said by him. Self-formation has
not commenced. And would this has
commenced how can one become respon-
sible for his actions either morally or
religiously? ————— We

have thus seen the two extreme errors
to which these two Doctrines lead. They
both admit & both suppress certain im-
portant & leading truths of Human
Nature. From these two Doctrines, by
Johannes many of every gradation from
the one to the other have been deduced
equally as absurd as the original
Doctrines themselves. But in some
of them has there been that which
was sufficient to satisfy the mind of
the religious physiologist; a founda-
tion satisfactory on which to stand
It has therefore been left for him
to rear a new superstructure consist-
ent, harmonious & beautiful, in all
its parts involving no egregious errors

leading to no false views & practices -
And in no theory so far as I know do
we find so much that is consistent with
both that is so satisfactory to the Human
Mind, viz which there is in itself such
beautiful harmony as in the one which
may be termed the Correlation of Forces:
By which I mean, the recognition that
"Power of the Will to develop nervous
activity," & of "Power-force to develop
Mental activity." Now we recognize
a Correlation between these two modes
of dynamical agencies. If it be con-
tended that this view is in the least
opposed to the idea that Mind may
have an existence altogether inde-
pendent of the Material body through
which it thus manifests itself, it
will be seen that it only shows that
the connection between the Mind
& Body is such that each ~~is~~ as has
been said ^{has} in virtue of its constitution

a definite relation to the other in this
present state of existence; & that the action
of our Principles as they are carried
on without any interference of our
Wills are or may be, considered the
functions of the Cerebrum. But so
far as the Will exerts a controlling and
directing power over the course of thought
or for we have evidence of a new & entire
a independent power which as it is ha-
bitually exerted tends to render the indi-
vidual a free agent. It is indeed only by
the Virtue of the Will that we are not
mere thinking machines. Instances
are not wanting however of those who
acting for the most part from mere
impulse almost entirely lose the pow-
er of exerting it & hence may be called
mere thinking automata. And it
is by the knowledge obtained from
these states that we gain the most
satisfactory ideas of how much is due

to the Will in the operations of the Mind
& in controlling our thoughts & how much
to mere automatic operations. — To
speak now of the various elementary
forms of mental action or the modes
in which the Mind is gradually devel-
oped would be both interesting & in-
structive, but there will not permit
Of the most important perhaps
there is the impressions external to
the organism made upon it pro-
ducing consciousness. In fact, it is
through the avenue of the senses that
our Minds do not remain forever
dormant. As a seed lies at rest so
long as not exposed to those congenial
influences causing it to germinate
& bud & blossom & bear fruit, so the
Mind so long as closed to all the
aids of sensation remains inactive.
It is only through this medium, sen-
sation, that we obtain a knowledge

of the material world around us. But
did we advance no farther than
this, a sensational consciousness in
the scale of development of the Mind
we should be little more than mere
machines. But when the Mind has
attained a certain stage of develop-
ment, it seems of itself to distin-
guish that which is external of the
cause of a sensational change. Such
perceptions are termed intuitions or
intuitions. In this sphere we inspect
in which the Mind acts are in-
cluded many things of great im-
portance in its religious develop-
ment. For instance: it is by those
intuitive feelings of awe & reverence
inspired by objects of grandeur &
sublimity connected with that
moral sentiment of goodness
that we receive the first impres-
sions of religious teachings.

But still higher in the scale of de-
velopment we arrive at that state of
the Mind in which its operations be-
come more & more separated from
the changes sensation ^{alone} produced
in them & forms that distinct men-
tal ~~representation~~ or Idea of an
object which is wholly separate from
Experience & has the character of
an independent mental truth.
From this action of the Mind we
gain those ideas relative to the
Existence & Attributes of the Deity
We necessarily form the idea of In-
finity by the perception of finite ex-
istence of the Self-existent by de-
pendency & so on. It has been sup-
posed that in this manner is form-
ed what is termed Conscience, the
Moral Sense, considered by theologi-
ans as an autocratic faculty. But
it seems to me rather view by itself

alone involves an error. The deter-
mination of what is right & wrong
is not a matter of judgment alone
more than the dictations of an
absolute faculty. But it depends
upon a combination of action
viz upon that natural apprehension
of right & wrong which in the child
precedes the power in them to com-
prehend language by which we
convey moral truth & also upon
the judgment. This it seems to me
to be the correct view.

Such are a few of the modes in
which the mind is gradually de-
veloped & the results. As the mind
arrives at a higher stage of devel-
opment its operations become less
single & more complex. These are
known as Intellectual faculties
including the reasoning powers, &
imagination &c. But of the highest

importance among the operations
of the mind is Volition - the direct-
ing & controlling power of the Will.
This may be used as the means of great
good as well as of great evil. And this will
wholly depend upon the direction in which
it is ~~employed~~ employed. If we do not allow the high-
er class of motives to influence us if we
disregard the dictates of conscience
& fix the attention upon the indulgence
in sensual & malevolent propensities we
shall acquire more of the Satanic than
Divine character. But so far as we
pursue an opposite course so far we shall
possess more of the Divine character.
In the words of another - "from the
Satanic & positively ~~evil~~ fully evil
types of Human Nature in which the
highest powers are turned to the worst
account, we are thus conducted through
the brutal or negatively evil type to-
wards the higher aspect of Humanity

which is presented by those who habitually keep before them the Divine ideal & who steadily endeavor to bring their whole nature into conformity with it. This is not to be effected by dwelling exclusively on any one set of motives already referred to as those which the truly religious man keeps before his mind. Even the idea of Duty alone tends to reduce the individual to the subservience of a slave rather than to induce in him that true mastery over himself which consists in such a regulation of his emotions & propensities that his course of Duty becomes the spontaneous expression of ^{his} own higher nature: but it is a most powerful aid in the acquirement of that regulation by the fixation of the thoughts & affections on things on which is the best means of detaching them

from all that is earthly & debasing. It
is by the assimilation rather than by
the subjugation of the Human Will
to the Divine that man is really lifted
up towards God: & in proportion as this
assimilation has been effected does
it manifest itself in the life &
conduct: so that even the lowliest
actions become holy ministrations
in a temple consecrated by the felt
presence of Divinity. Such was the
life of the Saviour. Towards that stand-
ard it is for the Christian disciple
to aspire.

W. Gregory Hall,
1860



and a movement, as if preparatory to a tiger like spring on his visitor, who had just entered his cell, the unfortunate being saw eyes beaming with kindness and placid features, expressing benignity and good will. Soon his own countenance underwent a change; the mere brute was once again a human being; and when the tones of affectionate inquiry reached his ear, and the hand of greeting was extended towards him, he could only answer and reciprocate by shedding tears, the fountains of which had long been dried up by the fiery furnace of maddened feelings, wrought to fury by angry menace and brutal punishment. From this moment the cure of the poor maniac, which had been regarded as hopeless, was begun, and terminated in entire restoration to health and reason.

But I have already



wearied your patience, and in conclusion would say that such is Medical Heroism. Such are some of the bright examples which our much disparaged Profession furnishes. It is true the world ignores them, and that Medical Heroes are not appreciated when living, and are forgotten when dead. But he who patterns after them, and strives to equal them, evinces true and laudable ambition; for it is a yearning after virtue for virtue's sake.

P. Edward Brush.



noble character were united the physicians skill, the soldiers courage, and the Christians humanity." The name of Howard is every where celebrated, and praised in terms of warm gratitude; as the reformer of prison abuses and prison cruelties. It has obtained a place in the history of the worlds progress. The name of Pinel is not I am afraid, familiar even to the medical world; and it is still less to the world at large, as that of a physician, who, both by personal services and earnest teaching, brought about a reform in the management and discipline of Asylums for the Insane, which may now be properly regarded as one of the strongest proofs of advanced civilization. If a proper sympathy and sentiment for humanity and justice have been enlisted by the benevolent Englishman, in what light ought we to regard the services of



the equally benevolent Frenchman, who reminded men of their duties to the Providence - stricken but irresponsible insane? Excuse might be found for vindictive harshness to the criminal who has made war on society; but where is the extenuation for more deliberate cruelty practiced so long and so generally on those unfortunate beings, bereft of their reason, many of whom, but a short time before, had been the delight of the social circle, and cherished members of the family? That was indeed a critical moment in the life of Pinel, and in the history of benevolent trials for the mitigation of human suffering, when he resolved to test the correctness of his principles of non-restraint, by holding direct personal intercourse with a violent maniac, whose chains and fetters he had previously directed to be removed. The trial was entirely successful. After an eager gaze



Miller, of the Red Sandstone fame. Provided with some rum, biscuit, and salt meat, he was left with his charge; his only companion a private soldier, acting as his servant. This was indeed a forlorn prospect. Could he escape from the savage assaults of the marauding Cossacks, a party of whom had ruthlessly destroyed a villa not many miles off, on the road to Balaklava, the residence, too, of a Russian country surgeon or physician, who had been obliged to make a hasty retreat. Even the patients themselves, whether under the influence of fever, caused by their wounds, or by mere brutal ferocity, had fired at or stabbed the humane individuals who were then dressing their wounds. Five days, however, did Surgeon Thompson pass in the midst of such a people, whose language was unknown to him, without any companion but his soldier servant. Often



were these two Englishmen obliged to extricate the wounded from beneath the dead before their gashes could be healed, and also to bury the dead because of the pestilential smell arising from the mutilated carcasses. Their scanty supply of food was about to fail them. On the dreaded approach of a swarm of Cossacks, 340 wounded men, who five days previously lay in helpless agony on the ground, walked away with Surgeon Thompson to the shore, and, after overwhelming their deliverer from death with expressions of gratitude, sailed for Odessa.

The surgeon himself escaped from the Cossacks, and reached the English head quarters on the 4th of October, but died of Cholera the next day, worn out by the hardships he had undergone.

Surely" adds the English journalist "James Thompson of the 44th regiment, has earned a monument, for in his own



of benevolent zeal spent on so good and useful a purpose. Again in the Crimean war, after the battle of the Alma, in which the Russians were defeated by the allied troops of France and England, in 1854. All have read of the feats of valor displayed on both sides on that bloody field - the sweeping fire of the artillery, the daring charge of cavalry, the deadly encounter of the columns of infantry, when men met men with bayonets crossed, in the mixed excitement of animal passion, national rivalry, and the thirst for honor and distinction. The names of St. Arnaud and Bugeau, the victorious Generals, were suddenly sounded in both Hemispheres, and they took at once their places in history. But the real hero, the savior, not the destroyer, appeared on the day after the battle, unheralded by drum or trumpet, a devoted, and to all appearances a doomed volunteer in the cause of humanity. The



allied forces were under the military obligation of advancing rapidly on Sebastopol in pursuit of the retreating Russians, and in so doing to leave 750 wounded of the enemy behind them on the field of battle.

"Who" to use the words of an English medical journal, "is that single individual who, of all the host that is marching away from the scene of its late triumph, is still to be found on that blood stained field? And what is the errand on which he is engaged, thus alone among his enemies, watching the retreating forms of his friends, his countrymen, and gathering up his courage as best he may, to undertake the duties which, in obedience to the dictates of humanity, it has become his duty to perform. This most painful and desolate duty was imposed upon himself by Dr. Thompson of the 44th regiment, a native of Cromarty in the northern part of Scotland, the birthplace also of Hugh

plague; but he inoculated himself with their blood and other fluids. On another occasion, after Berthollet had expressed his belief that the poison of the plague was conveyed into the body by means of the saliva, a patient, dying of this disease, begged that Desgenettes would take a part of what was left of the draught that had been prescribed for him. Without hesitation, or betraying the slightest emotion, Desgenettes took the cup from the sick man, filled it up, and drank its contents entire. If we believe that the design of the two — the military leader and the physician — was the same at this time, viz, to infuse confidence into the minds of the soldiers, it is not difficult to decide to which of these should be awarded the palm for this daring exposure of his life. Napoleon felt that all of his prospects of conquest and fame would be clouded unless he could restore the sinking courage of his army; and hence he readily

incurred some danger to secure so important an end. Desgenette was buoyed up by no such aspirations. His incentives were humanity and a search after truth. Why not make this fine trait of the physician more prominent than that of the soldier in a school history? While French medicine was thus represented in Egypt by the calm and selfpossessed Desgenettes, who was at the head of the medical staff, French surgery shone with perhaps still greater lustre in the person of the eminent Larrey, who, by his invention of the light ambulance for carrying off the wounded from the field of battle, won the affection of the soldier, and by this act alone becomes entitled to honorable mention in the annals of philanthropy. From the burning sands of Egypt, to the ice-bound rivers and snow-covered plains of Russia, in Poland, in Saxony, in Austria, in Italy, in Spain and in France itself, Larrey not only encountered all the vicissitudes of climate

and season, and the hardships incident to camp life, but he was constantly engaged in the discharge of his arduous duties as field and hospital surgeon, fearless of personal risk, and intent only on affording the promptest relief to those placed under his care. He did not wait at a safe distance from the field of battle for the wounded to be brought to him; he was found in the midst of the wounded, the dying, and the dead, ready and resolute, and always self-possessed; operating with equal promptitude and skill on those whom he could first reach or who were most in need of his services, and not caring for the rank of the prostrate man before him. Instances are recorded in which Larrey and his assistants, carried away by their professional, and shall it be said, in part, also, their national enthusiasm, were seen giving their attentions to the wounded near the imminent and deadly

breach itself, amidst a shower of destructive missiles which were carrying wounds and death to those around them. Larrey was exposed to the same fire under which Caffarelli, Lannes, Beauharnois, and many others fell, either wounded or never to rise again. After the long contested and bloody battle of Eylau, in Polish Prussia, between the French and Russians, the Emperor Napoleon found Larrey standing in the snow, under a slight canopy of branches of trees, engaged in dressing the wounded; and on his passing by the same place, at the same hour, on the following day, he saw the indefatigable surgeon still occupied as before. In this way did Larrey spend twenty four hours uninterruptedly, except in the few minutes snatched for a hurried repast. We have all heard or read of displays of Zeal - religious, fanatic, patriotic, and amorous - but seldom has there been recorded a finer example

place, as one of the medical heroes who won his honors and enduring fame in the trying year of 1793, and in the other epidemic invasions of the yellow fever during the next twelve years. The fever of 1798 revived the terrors and mortality of 1793, and at the same time, gave opportunities for a display of heroic devotedness on the part of the physicians similar to that manifested in the latter year.

Still more animated must have been the feelings of the whole French army in Egypt, under Napoleon, or as he was more commonly called Buonaparte, towards the chief of the medical and surgical staff.

The troops after witnessing the ravages of the plague, became alarmed and disheartened; and men who had never feared an enemy in the field of battle, now shrank with horror from the touch and breath of a sick companion in the quiet tent. To the General such a state of things

was worse than the loss of a battle. In
vain were the soldiers told that their fears
were without foundation; in vain were
they addressed in the language of encour-
-agement and hope. Something must be
done; either to change their belief or to ap-
-peal strongly to their imagination.

Accordingly Napoleon himself conversed free-
-ly with the patients who were stricken with
the plague, and touched their bodies, and
even sometimes performed the part of a
nurse by raising them up and supporting
them in their beds, in order to prove that
there was no danger, and that the dis-
ease was not contagious. These traits of
cool courage are recorded by every historian
of the wars of the French Revolution; but
few have thought it worth while to no-
-tice the more daring exploit of Desgenettes,
one of the physicians of the ^{army} in Egypt. He
not only touched and handled the bod-
ies of those who had sickened with the

inducements; they could readily afford to forego a part of their reputation for benevolence and disinterestedness, in consideration of their receiving that by which they could support their wives and children, or an aged parent, or a lone sister. But it so happens, that in all epidemic and pestilential diseases, the chief privations and dangers incurred by medical men are in their attendance on the poor, the needy and the destitute, and not seldom the dissolute, who have no claim on them by prior acquaintance or the most trivial service, and from whom they receive no fees, and often no thanks, or the slightest token of gratitude. The greater part of the mortality among the Irish physicians was caused by their attendance on hospitals and on the poor and half starved occupants of cabins and hamlets, the air of which was often in such a state of concentrated virulence as to strike on the nervous system with

8
almost the force and suddenness of the electric aura. And shall no page in history, no lines in poetry, celebrate the heroic deeds of these devoted men, who must have battled with a stouter heart against an unseen enemy than Leonidas and his Spartan band against the Persian host, or the Light Brigade in its daring and rash charge on the serried Russian lines at Inkermann? These heroes of humanity ought to be honored with a monumental inscription, even though it were couched in as brief a phrase as that over the remains of the Athenians under Miltiades—
"They fought at Marathon."

In the history of the war of the revolution, Dr. Benjamin Rush as one of the signers of the Declaration of Independence, and Physician General to the army, will always figure with the other worthies of that momentous period. But in the history of philanthropy he will occupy a still higher

Medical Heroism.

Medical Heroism!

Is there really such a thing? The world knows nothing of it. Who ever talks of such a thing. Who ever disconnects the idea of heroism from feats of "broil and battle"?

Who ever thinks of seeking for true courage in the much despised, often ridiculed, and very generally unrequited vocation of the Medical Practitioner? Does history in the discharge of her duties, rake up for record instances of heroism from such a despised source? Does the novelist, as he ransacks history, or scrutinizes society from palace to hovel, for material, ever dream that the "Doctor" of his story can figure in any other than a ridiculous attitude? Is there

2
truly anything in the actions of medical men that is heroic? Is the "Doctor" ever the hero of anything save a nauseous draught or a petty professional quarrel? Alas! that the world generally can ask these questions in the utmost sincerity. Alas! that the profession must sound its own praise, or never hear it.

Medical Heroism is not a myth. Every practicing physician has often braved danger, without hope of reward, either in money or fame. But it is not strange that the world does not fully appreciate this fact. It is too common to be noticeable. But when pestilence walketh abroad, and startled communities fly from the scene of danger and death — when ties of friendship or blood are not strong enough to retain the fleeing ones, to smooth the dying couch and administer the cup of water to the loathsome relic of friend or brother — who stand

firm, and faithfully discharge duties which are now heroic in their nature?

Not only so; but when the ranks of these brave men are thinned by the enemy which they so determinedly battle, who step in to take their places? Who leave home and friends, to fly to the rescue?

Medical Men, Is it not strange that such deeds do not live in history. Perry lives in the hearts of his countrymen, and monumental fame will be his; but will admiration or gratitude ever call up and perpetuate the names of those brave men who volunteered and fought the cholera in Sandusky, with a courage unsurpassed, and a determination in which, "Don't give up the ship" was written in acts of love and mercy? The two are neighboring scenes: one is already sacred; will the other ever become so? Will the Medical Heroes of Norfolk live in history? Yet deeds of bravery were there enacted such as were

never witnessed on battle field. No short-lived excitement moved those men, but for weeks they coolly faced the enemy, until they finally fell in action, or were permitted to share in victory. The medical hero in Christian lands is not to be sought for in courts or in camps; nor in the busy and crowded haunts of the wealth-seeking; he is neither a demagogue, inflaming the passions of the multitude, nor a parasite flattering the prejudices of the rich, or ministering to the caprice of those in power.

He seldom finds a place in pageant or in festival; seldom is called upon to add his voice to the peans of victory. He passes through the crowd often unknown and uncared for, unless indeed it may be when he meets the face of one radiant with smiles, whom he had visited but a short time before, prostrate on the bed of sickness, or hears his name uttered by another in a tone equivalent to saying, God

bless him"! But in what terms, by what epithets shall we designate him who, without any such genial incentives, without any expectation of possible reciprocity, or hope of applause, and certainly without any of the returns for self exposure which men might expect of men, goes about from day to day, and often too in the silent watches of the night, in a spirit of self-sacrifice of ease, comfort, health, and life itself, ministering relief to his pestilence-stricken and fever tossed fellow creature, the inmate it may be, of a garret or a cellar of some wretched tenement, in an ⁱⁿaffected court or alley, the approach of which is by a narrow passage, obstructed by accumulations of all kinds of refuse and impurities? Is this man a soldier, inured to scenes of carnage and death, whose vocation makes him regardless of danger, and who, although he may be detailed on the folorn hope, knows that if he falls, his name will be recorded in the

Gazette, and his wife and children receive perhaps a pension? Or is he a salaried official who, for a certain pecuniary return and perquisites, is discharging a prescribed and covenanted duty? Oh no! This simple-minded man, who goes about his duty for duty's and humanity's sake, is only a doctor, one of a class at whom every witling is privileged to fling a sarcasm, and whom every venal quack may accuse of selfishness, and greediness of gold. "During the famine fever of 1847 in Ireland, one hundred and seventy eight Irish medical practitioners, exclusive of medical pupils and army surgeons, died, being a proportion of nearly seven per cent, or one in every 15 medical practitioners in a single year." Some persons may say that physicians who thus expose themselves, and who pay the penalty of death for their exposure, are encouraged by the expectation of pecuniary advantage in the shape of fees. We must all wish that they had such

A dissertation on Aneurism.

by

Evelyn Lyman Bissell -

- Candidate -

For the Degree of Doctor in Medicine.

January 12th 1860.

A Dissertation on Aneurism.

By the term aneurism, is meant a pulsating tumour, composed of a sac filled with blood, partly fluid, partly coagulated, and whose cavity communicates with an artery.

Of the different kinds of aneurisms. First, there is the true circumscribed aneurism, which consist of a sac formed by the dilatation, or by rupture, or ulceration from within of one or more of the arterial tunics, and is generally the result of some organic disease. Secondly, the false or traumatic aneurism, which is formed by the dilatation of the lymph, which forms the cicatrix after the wound is healed. Thirdly - the dissecting aneurism, when the blood strips up one or more of the arterial tunics, and finally opening into the artery at another point. This form of aneurism is generally a rare disease. Fourthly - the diffused aneurism, which is caused when the artery is lacerated by a broken bone for instance, without any wound in the skin, or where the artery has been punctured and the

wound in the skin has healed quickly, that in the artery remaining open. the sac formed in this case, is the cellular tissue. Besides these, there are other kinds which ^{it} will not be necessary to mention here at present, but I will confine myself, to the description of the most important, as well as the most frequent of these, namely the true circumscribed aneurism.

First, as to its pathology. From the recent investigation of our modern Physiologists this disease literally shows that there is some alteration, or change of structure in the coats of the artery. Sometimes the middle coats become opaque and yellow in consistence, sometimes it degenerates into a fatty substance, which has a soft-pultaceous atheromatous matter deposited upon it, which if seen under the Microscope "shows it to be composed of earthy and albuminous matter, a few oil globules, crystalline scales and plates, and is chiefly composed of cholesteroline, a substance analogous to that found in the Bile. Lastly there may be deposited in spots or scales a brittle calcareous substance composed of Phosphate of Soda, which in old people is of a

common occurrence. At the site of one of those atheromatous spots, the aneurism commences by the giving away of the internal and middle coats of the artery. The external coat being of an elastic nature is soon dilated into a pouch from the continuous pressure of the heart's impulse in it, as the aneurism continues to grow larger and larger, it soon becomes lined with coagula, this in process of time is deposited in concentric laminae, of which the outer laminae are the palest and firmest in consistence.

Symptoms - In the first place it will be well to take into consideration the history of the patient as our guide. They will say their attention was attracted, by some soreness of the parts, which upon examination, if it be seated upon the neck, trunk or limbs, will appear as a small tumour, filled with blood in the course of an artery, pulsating with it synchronous with the heart's actions, this tumour, if there be no coagulum, will be increased by pressure on the distal and diminished on the cardiac side, upon removing the pressure the blood will return in two or three pulsations, with a peculiar vibratory thrill or whizzing sound.

which is imparted to the fingers. The pain at first is slight, but it gradually becomes more intense, as the tumour grows larger owing to the pressure upon some of the nerves, there may be occasional pressure upon some of the veins and lymphatics, causing oedema, discoloration and swelling.

Sometimes as the tumour increases in size, they undergo some very important changes, the blood coagulates, on account of the fibrous portion of the blood depositing layer after layer, until the cavity is rendered so small that only a channel is left for the passage of the blood, to other parts of the body, below the aneurismal tumour. The disease ending in this manner is said to be the result of a spontaneous cure. Instead of taking this course, the tumour continues to grow larger and larger, and in spite of the resistance of the adjacent parts, its coats become thinner and weaker, these though the recuperative powers of nature, are strengthened by the adhesion of the parts around it, as the enlargement continues, these are absorbed and so are all the other tissues, that happen to lie in contact, bone, muscles, nerves, tendons, ligaments

are equally absorbed as well. The system once healthy begins now to feel the lurking disease as it is making its fearful march onward to dissolution. The pain, oedema and numbness is increased; the strength begins to waste away. The stomach and digestive power begins to fail, there is hectic, restlessness, want of sleep and sometimes there is delirium. The patient after being subjected to this long continued irritation without finding relief dies at once, from profuse hemorrhage, either ~~the~~ by the aneurism bursting into a mucous canal, as the trachea or oesophagus, or into a vein, or into a serous cavity as the abdomen or externally.

Diagnosis - The diagnosis of aneurism in connection with other tumours, is one of the most important, as well as the most difficult points in surgery. The following however will enable us to make some distinction between abscesses, glandular swellings and solid tumours, by noticing first, that aneurisms from their earliest formation are soft and compressible, and afterwards become hard - view v. view. abscesses. begin with induration and



and in softening. 2^d a tumour or other solid swelling, that has received an impulse from lying over the track of an artery, will be found when raised or held to one side, in proportion to the distance of the artery, to pulsate very faintly. In aneurisms the change of position which ever way is assumed, affects it but little. 3^d Aneurisms can be more or less ~~emptied~~ ^{thru} of its contents, solid tumours cannot either on its distal or cardiac side.

4th Psoas abscesses can be distinguished from aneurisms, by the great pain, tenderness and weakness in the back, and the disappearance of the tumour when the patient lays down -

Causes of aneurisms - This is divided into the predisposing and exciting causes. The predisposing cause is owing to the morbid change of one or more, of the coats of the artery, as it has been shown in the fore part of this subject. It may also depend upon a want of tone of the whole arterial system, this is known by a very hardness of the pulse, and a peculiar thrilling far of the ^{arteries} pulse - The periods of life most favorable for -

this morbid change is between the ages of thirty and fifty. ~~It~~^{It} occurs more frequently in men than in women, though the opinion of some authors, say that it is occasionally seen in children. It may occur after a long continued excess of intemperance, syphilis, chronic gout, rheumatism, and the use of mercury -

The exciting causes. The most prominent of these are strong emotions of the mind, sudden and violent muscular actions, such as lifting heavy weights, jumping, coughing and vomiting - Local injuries such as the wounding of an artery &c -

Treatment of aneurisms. The indications are, to stop or check the flow of blood, through the aneurism, and to produce coagulation of the blood within it. The means adopted are, internal remedies, that tend to reduce the force of the heart's action, and energy of the circulation, and surgical manipulation, by means of compression and the ligation of the diseased artery -

Before deciding upon any of the operations, it will be

will enough to try to bring about coagulation of the blood within the sac, in those cases where no operations can be performed, as it is the only means we have, that by which we can hope to lengthen out the patient's existence.

The patient should be confined to his bed, on a low spare diet as possible; all bodily or mental exertion and fermented liquors should be rigidly abstained from. If of plethoric habits and the tumour increases rapidly, he should be bled once or twice, but it should never be carried to faintness, for fear of producing fatal syncope.

Of internal remedies, much benefit is derived from "digitalis" and tartar emetic in moderate doses, also from the acetate of Lead combined with opium. If all these fail in arresting the progress of the disease, resource should then be had, either to ~~by~~ compression, or ~~by~~ the ligature, and first by Compression. Until a recent period the treatment of aneurisms by the ligature was the only successful treatment, but of late years, it has been ascertained that by pressure they could be treated as successful as by the ligature, provided the aneurism



is situated in such a way that an equable and steady pressure can be made upon the artery, ~~but~~ neither is it necessary that the pressure should be made too violently or too severely upon the artery, but just sufficient to arrest the flow of blood into the tumour, but not entirely through the artery. Dr Knight says the best manner of making pressure is by the tourniquet, and formerly to applying it, you should envelop the whole limb with thick sole leather, or pasteboard splint, excepting a strip over the artery the object of this is to remove ~~tension~~ and prevent swelling, ^{to} which the limb would otherwise be subjected. If this cannot be done, pressure must be made by means of your thumbs, if either one of these two methods succeeds, the aneurism will after a short time, be found to have lost its pulsations, and to have become solid. This may occur in three to six days or it may require as many weeks after which the tumour is gradually absorbed, and the limb may be brought into use again —

2^d By the Ligature. In cases in which the above plan is inapplicable, or unavailing, the artery must be tied between the aneurism and the heart. The operation should be performed rather to near the aneurism, so as to place the ligature in a portion of the vessel that is diseased, nor too far from it, lest the circulation through it be kept up by means of collateral branches. After the operation the limb falls two or three degrees, but in a few hours it rises higher than that of the opposite limb - In case a ligature cannot be applied between the aneurism and the heart, it has been proposed to ~~fix~~ tie the vessels on the distal side, but it is a dangerous and uncertain operation, and should be performed only when the tumor increases rapidly, and cannot be checked by any other means -



Thesis.

Yale Medical School

Cataract.

By

Timothy H. Bishop

January, 12. A.D. 1860.



Cataract.

This disease consists in an opacity of the crystalline lens, its capsule or of the Morgagnian fluid either separately or conjoined with a consequent diminution of sight.

varieties.

The forms of this disease are numerous varying as to consistence, color and the seat of the affection, and complicated often with other diseases of the eye.

The new treat of this relation to their seat, including all under four divisions.

Leish.

The Leishman, when the lens alone is affected, divided into the Hard, Soft, Radiated and Fluid. The Hard most often affects the aged, the opacity is of a grayish color with an Ambro shade at the center, the

now of this amber the harder the cataract the softer is larger, presses against the Iris, and rendering the anterior surface convex, and impairing its motions the color is nearly clear white, the light is now intercepted than in the purpuris variety. The Radial has its opacity in streaks from circumference to center, the light striking on these streaks and being reflected troubles the vision. In the Glucis the opacity is the same and as thick at the edges as at the center, of a dull grey or yellowish color.

Second.

The Capsular including the Anterior Posterior and Complete in the iris: the opacity may be seen behind the Iris, of a glistening, chalky appearance in the Posterior behind the lens, of a dull striated appearance as seen through the lens, the Complete hardly is to be

distinguished. In all these forms of the Capsular variety the opacity occurs anywhere in the membrane in streaks or spots with intervals of more or less transparency.

Lenticle.

The Capsule Lenticle, the most common of all, large in size may press against or destroy the anterior chamber, if it presses against the cornea the patient can hardly see day from night.

There is one other variety spoken of, called Morgagnian consisting of an opacity of the fluid contained in the capsule.

Causes.

It may be congenital, caused by some arrest of development, or the result of impaired nutrition, as in the aged; again some injury to the eye causing inflammation may result in cataract, but very little is really known of the cause of this disease.

Symptoms.

For an examination of an eye with suspected cataract the pupil should be dilated with belladonna, then a body of an opake, grey, amber, bluish white or clear white appearance may be seen behind the pupil: it is usually slow in progress taking years in some cases for its full development, yet it has been known to come on in a few hours. In the worst cases if uncomplicated with disease of the retina or optic nerve the patient can distinguish day from night, one eye only may be affected or both.

Diagnosis.

Cataract must be distinguished from glaucoma and amaurosis, in some cases this is quite difficult without very careful observation: but they differ as to color, cataract being of a grey, white or blue white or yellowish brown amber: glaucoma and amaurosis both have the

pupil of a green or yellowish green: in
cataract the opacity seems near the pupil
or just behind it, in glaucoma and
amaurosis the change seems at the bottom
of the eye & as to be lost if looked at
sideways. The vision in cataract is
cloudy and obscure, more dense at the
center so that objects may be seen at
the side when not above in front and
the patient sees best in a dull light,
but in glaucoma and amaurosis a
strong light assists the sight, dilatation
does not, when the eye is shut glances
are seen, things are discolored to the
sight not clouded. The onset of cataract
may not be observed by the patient attended
by no trouble in the eye or head, not so
with glaucoma and amaurosis which
are often preceded by various disordered
sensations that call the attention of the
patient to the diseased organ. But all
these signs may fail, there is one test

However what is interesting, viz. Catoptics
In a healthy Eye if a lighted candle is
held opposite, three images may be seen,
two upright and one inverted, the Cornea
Having a convex polished surface reflects
an upright and small image moving as
the light is carried laterally, the anterior
surface of the Crystalline Lens reflects a
similar image but larger being magnified
by the lens in front. The posterior surface
of the Crystalline Capsule Having a Concave
surface the image reflected is inverted,
made smaller moves in a direction
contrary to which the candle is moved,
this image is the smallest, though perfectly
distinct and quite bright it appears
anterior to that formed by the anterior
Crystalline Capsule but posterior to the
Corneal image. Now then these three
images are seen in a healthy Eye
but in one diseased by Cataract
the brilliancy and distinctness of

The inverted image begins to become changed it is not sharply defined but shaded off until before the cataract is mature this inverted image is lost, the dup Erect image is also indistinct, in the advanced stages almost obliterated; in Amaurosis the Chars are as distinct as in the healthy state; in glaucoma the inverted image is distinctly perceptible in the early stages and is formed at the edges after it can not be seen at the center; the dup Erect image is more distinct if anything than in the healthy eye.

By all these differences and tests we can hardly fail of making out a correct diagnosis.

Treatment.

Constitutional and local treatment have been employed to restore the health and procure a restoration of the opaque lens or its capsule to its healthy and original

Condition, many Remedies have been tried as sure specifics, but without any success.

Bella-donna may by Enlarging the pupil for a time assist the sight, and if the cataract be small furnish useful if not perfect vision; if there is Effused Lymph the usual treatment will, if recent, cause its absorption. For this show this the only means of Relief is by operation.

Prognosis will be favorable if the health is good, if the disease is confined to the lens or capsule, if uncomplicated by disease of Utricle or optic Nerve or iris, but unfavorable if complicated with Amaurosis or glaucoma, contracted pupil, Pain in head, flashes of Light, a various state of Blood vessels. Pupil adherent as in the aged. The question arises, when should the operation be performed? The rule is, when the cataract is mature, that is when the patient has become blind; but suppose one eye only is

diseased, Should it be operated on? if by removing the disease in one eye it shall be prevented from affecting the other, then it would be best to operate, in all cases. There are cases reported in which one eye was operated on and the disease did not appear in the other, and it seems as if one eye might be affected sympathetically since there is so much of sympathy between them in a healthy state, but as we do not know this to be the fact, it is best to refrain from operating, if one eye only is affected. The patient should be prepared for operating by such means as shall guard as much as possible against the accession of inflammation. The alimentary canal should be in a healthy state, if needed use a Cathartic, bleeding may be useful in some cases and a low diet, and let the patient's mind be in such a state to expect a favorable termination.

There are three methods of operating

Shaken of by anchors, The oldest (first described by Celsus) is what is called depression or couching, consisting in the introduction of some instrument by which the lens is pushed back and down out of the axis of vision; The second is Extraction first spoken of by Daniels a French Surgeon: The other, called the operation for causing absorption, is the favorite with many, consisting in a rupture of the lens, and then leaving it to be removed by absorption. These several methods must be described separately. Depression is the favorite practice of most American Surgeons, a several operation indeed, but not now so than many others performed on so sensitive and delicate an organ. There are four ways of operating: We will describe but one. The needle is the only instrument required. Place the patient below the Surgeon and in front, having his head

Supported and the upper lid Elevated and fixed by an assistant, the operator can depress the lower lid and steadily with one hand and use the instrument with the other; the eye having been dilated with bella-donna the needle should be inserted in the outer side of the sclerotic coat about one and a half to two lines from the cornea a little above the middle to avoid the long ciliary artery, then carries it upwards and forwards in front of the lens, and then pressed steadily back and down out of the axis of vision; when fixed in the position the needle may be withdrawn by a rotation to disengage it from the lens; if the lens should rise it must be again depressed if it escapes in the anterior chamber it must be removed by extraction. Reclination differs from the form described in the lens being turned over in the

12.
process. The process by which the
absorption of the lens is produced, is
similar to that just described. The lens
is to be dissolved by the aqueous humor
therefore it must be sacculated with its
capsule and pushed into the Anterior
Chamber: The needle is to be introduced
as before described: when the point has
reached the lens the sharp edge is to be
turned so as to cut and sacculate the
lens and capsule, at the same time
pressing forwards the small fragments
into the Anterior Chamber, where they
may be in time absorbed. The operation
may need to be repeated many times,
as great care must be taken not to
do too much at a time lest inflammation
arise from too much or too hard matter
being in the Chamber. This method is
termed Sclerotomy: when the needle
is introduced through the Cornea, as
is best in some cases, it is called

keratonyxis.

The operation of extraction by section of the cornea is preferred by some being quicker though perhaps not as safe as the other forms of operating.

Some peculiar instruments are needed, a knife triangular in form, straight on back slanting on cutting edge increasing in breadth and thickness from point. Called "BEER" knife. The other instruments I will not describe. There are three steps in this operation. To divide the cornea, lacryate the capsule and remove the lens, all one operation in fact. The preferable spot for division of the cornea is either on superior or external side. The knife should be entered at the margin of the cornea directed not obliquely lest the instrument pass into the lamellae of the cornea and not enter the anterior chamber, then across the anterior chamber flat to the iris; this must be done quickly to avoid the



iris falling against the knife, or the aqueous
humour running out: Having reached the
nasal side the pressure used to steady the
eye should be stopped and the knife
brought out with an upward sawing
motion, then the lids may be closed for
a moment; if necessary the opening may
be enlarged by a knife or scissors: The
capsule is to be ruptured by means of
the curette introduced convex upwards
until the point is near the lens then turn
and excavate the capsule freely withdrawing
the instrument convex downwards: The
lens is now removed by steady and
slight pressure on the upper lid till it
resists and distends the iris. Take care
not to rupture the iris as it will yield
in form so that any lens may pass
without injury to it. Shut the lids as
the lens passes out lest the vitreous
humour may follow; if the iris is
prolapsed slight pressure and

Exposure to light will cause its return.

The operation being finished the lids must be left closed for a time, then opened to see if the cornea is fitted so as to unite properly. If any part of the eye protrudes pressure will replace it. The after treatment consists in keeping the corneal flap in position, and prevent too much inflammation, so that it will unite by adhesion. The lids should be closed and kept so by a light bandage. There are those who recommend the use of clasters to keep the eyelids closed, but we think there is no need of this, as the use of the bandage answers all purposes. Cold water may be put on the bandage if it is agreeable to the feelings: if there is anxiety so that the patient cannot sleep an opiate may be given: if there is no inflammatory trouble the eye may be cleaned by tepid water, but should not be meddled with, as no good can result from opening the eye early, and much

harm may, but ab or about the fifth
day, if there is little or no pain and the
lids not swollen, the lids may be raised
to see if all is going on favorably, and
the vision regular: After this the eye must
be kept shut, opened once in awhile
for about two weeks until it becomes
strong enough to bear the light. Spectacles
are needed on account of loss of lens.
The patient must be kept regular
and carefully for some time yet lest
inflammation may arise from even a
slight cause.

of the lung by pneumonia.

From empyema it is distinguished with more difficulty, but in this disease there is not apt to be any oedema of the face or feet while in hydrothorax there is generally evidence of some effusion in the cellular tissue. Empyema is usually preceded by inflammation which is not the case with dropsy.

Tapping must be resorted to when the difficulty of respiration is such as to threaten suffocation.

Hydropneumocardium. A few ounces of fluid may be found in the pericardium in a state of health - from two to six - but in this disease it may be increased to as many quarts.

In a man who died at Bellevue Hospital last May there was a collection of about five pints of dark coloured fluid and in connection with this there was considerable dilatation of the right

side of the heart - probably the cause of the effusion. Chronic inflammation of the pericardium or disease of the heart ~~large~~ large vessels are the causes of this effusion - As signs of this affection may be noticed a change in the shape of the chest, and by percussion and auscultation the extent of the effusion may generally be known.

There is no local treatment except in severe cases when paracentesis is sometimes resorted to, though according to Dr. Wood there are no cases on record in which this operation has terminated favorably - yet it may relieve the sufferings of the patient temporarily.

Abdominal Dropsy - Ascites.

Effusion into the peritoneal cavity is as frequent as any form of the disease for it always attends anasarca when the effusion into the cellular tissue is very abundant.

The quantity of fluid is sometimes great and though it may be relieved by drawing ^{it} off either by an operation or by the administration of hydragogues yet it is seldom cured! The pathology of this affection is the same as in other forms of dropsy -

It is necessary to distinguish this from other diseases as well as pregnancy. From solid tumors it may be known by the sense of touch - From a collection of air in the intestines by percussion, for in this case there will be resonance over the whole tumor, while in dropsy if the patient is on his back there will be resonance only at the upper part of the tumor or epigastrium - while the sides of the abdomen will flatten or bulge out and the gravitation of the fluid to these parts will produce dulness upon percussion - The cause of the resonance at the upper part of the abdomen

is that the intestines float in the fluid on account of the air contained in them and this brings them against the walls of the abdomen - In this way ovarian dropsy may be distinguished from ascites, the fluid in ovarian dropsy being contained in a sack or cyst, which as it enlarges rises up in front of the intestines and its position is not changed by the change of posture of the patient, but there will be dullness at the epigastrium, when in ascites there would be resonance. and if the ovarian tumor is of sufficient size it may press the intestines down at the sides so as to produce resonance ^{on percussion} in that region. From pregnancy it may be known by the same signs, as well as the absence of the usual symptoms of this disease - Ovarian dropsy was necessarily alluded to in describing ascites, but it will require a few words further - It consists of an enlarged ovary containing fluid.

It does not require the same state of the constitution as other forms of dropsy & and its first evil effects arise from the pressure of the enlarged ovary upon other organs.

It is not apt to be immediately fatal as the constitution is not so much affected.

The fluid may be drawn off by paracentesis or the organ may be removed by an operation - The plan of treatment applicable to all forms of dropsy is that by which tends to promote the absorption of the fluid and the removal of it from the system and also to prevent the renewal of the effusion - The first indication may be attempted by the continued use of mercury and some preparation of iodine. In connection with this the second indication may be accomplished by the use of hydragogue cathartics and diuretics.

Hydragogues should be used with caution for the constitution will not generally bear the continued use of them.

17
If the constitution will bear general bleeding it may be employed, for it will sometimes of itself sometimes cure the disease, by promoting absorption. Local bleeding by cupping will be useful when the chest alone is affected or when symptoms of compression of the brain appear such as stupor. The free use of drinks should be regulated and only enough to relieve the thirst should be allowed. as the free use of fluids taken into the stomach tends to reduce the quality of the blood and produces anaemia. When the constitution is debilitated a good nutritious diet should be allowed and tonics may be given.

In the operation of tapping care should be taken that proper bandages are used as the withdrawal of such quantities of fluid may produce faintness.

credit

be noticed - In severe cases of anasarca there will be some effusion into the serous cavities -

There is apt to be great emaciation which is noticed in those parts where there is no effusion, as also when the fluid suddenly disappears.

One of the causes of death in anasarca is an accumulation of fluid about the air passages producing strangulation.

It is said that nature sometimes cures this disease by discharging the fluid through the skin, and in the treatment it has been thought well to follow this indication, by blistering the extremities and allowing the fluid to escape in this manner, or by introducing a scaton, or puncturing the skin with a fine instrument.

All of these means except that of puncturing are open to one serious objection, that the ulceration is apt to be dangerous.

7
Puncturing should be performed with
care as it is attended at times with dan-
-ger.

Dropsy of the scrotum is some-
-times treated of as a distinct disease but
I would include it under the head of
anasarca as it requires no different
treatment. Puncturing is the appropriate
way of relieving over-distention, and may
be performed as in oedema of the exten-
-sities.

Hydrocele will not be con-
-sidered in this connection as it may
better be classed with those diseases
of the joints which are characterized
by a collection of fluid in the articular
cavities or in the neighborhood of tendons,
as an increase of the fluid of the
tunica mucosa.

Hydrocephalus or dropsy of the mem-
-branes of the brain.

This effusion may occur either in
the ventricles or between the membranes
of the brain. This variety should be

8
very rare occurrence deserves a short notice in account of its severity and fatality. It is a disease which usually attacks infants generally being present at birth, though it sometimes comes on at a later period.

There are a few instances on record of patients living to advanced age. Dr. Watson relates the case of Dean Swift in whom the disease did not appear until old age and for the last three years of his life he was unable to speak. He lived to the age of seventy-eight.

At the age at which this disease usually appears ossification is incomplete so that this collection may take place without producing dangerous compression of the brain. The head becomes enlarged while the face is not apt to be changed and this renders the deformity more noticeable.

After the fontanels become ossified, symptoms of compression appear, the result of which is the loss of the power of speech, of hearing, of sight or of voluntary motion. Paralysis sometimes occurs. The digestive function is always deranged, the bowels being constipated, that is, after symptoms of compression come on.

The quantity of fluid varies greatly, sometimes as much as a gallon is found after death. The brain is sometimes hardened, sometimes softened and when the effusion is in the ventricles the shape of the brain is gone and it will be found flattened.

If the effusion is between the Dura Mater and Arachnoid membranes, the form of the brain will be preserved.

The tendency of this disease is towards a fatal termination, though in some instances treatment has undoubtedly

acted favorably. The local treatment recommended is compression by means of adhesive straps and puncture or tapping - The last means should not be resorted to until all other fail.

The constitutional treatment will be referred to after the several variations are described.

Hydrothorax. A serous effusion between the pleural surfaces is a very common occurrence, generally the result of inflammation though a proper dropsy of the chest is not uncommon, as quite often after death there is found more or less of this watery collection which could not be accounted for by any symptoms of inflammation before death. In these cases as the disease advances respiration becomes difficult the patient being unable to lie down and must remain in the sitting posture continually during the advanced stages of the disease.

In most cases unless both sides are affected with the disease there will be considerable difference in form, the diseased side more rounded and expanded and by measuring it will be found sensibly enlarged.

There will always be dulness on percussion on the affected side as high up as the fluid extends - as the lung will be collapsed and all the air excluded by the mechanical pressure of the fluid and because the muscles of the chest cannot affect the lung as when there is no fluid within the pleura.

Fluctuation is sometimes felt and when the body is shaken the sound of the fluid may be distinguished but these are rare signs - By auscultation the natural sounds of respiration will not be heard but instead, a variety of abnormal sounds varying according to the extent of the disease - and with every change of posture - By this last sign it may be distinguished from consolidation



Dropsy.

By this term it is intended to express all abnormal collections of fluid in the cellular tissue or serous cavities except those which are the result of inflammation; which may be known by the presence of coagulable lymph, or that the effusion took place during an attack of inflammation.

In a state of health there is always some fluid in these parts and it is only when this is increased in quantity that it can be called a dropsy.

During health there is a consent of action between the secretion and the absorption of these parts which regulates the quantity of fluid, and a derangement of either of these functions may produce the disease in question.

An increase of the secretion the absorption remaining the same, or a diminution of absorption while the secretion

continuous must result in a collection of this fluid

Pathology of dropsy -

Dropsy depends upon a state of debility in which either the tissues are relaxed or the blood impoverished and is of a watery character, or both these conditions may concur to produce the result - A state of plethora with the blood healthy would tend to an inflammatory effusion, while an impoverished state of the blood together with relaxation of the tissues which necessarily follows this condition of the blood, tends to a non-inflammatory effusion -

The causes of dropsy are those which produce the pathological conditions just noticed together with any obstruction to the circulation in the veins, especially those of the "portal system."

Of the first mentioned, causes which produce

debility, relaxation and an impoverished state of the blood, are exposure to cold and moisture sudden atmospheric changes impure air, unwholesome food, impaired digestion, great loss of blood & excessive intestinal secretion.

Obstruction to the return of blood are, organic disease of the liver, or any tumor near the large venous trunks.

An enlarged liver may press upon the ascending vena cava so as to produce congestion in its branches thereby forming an effusion into the cellular tissue of the parts supplied by this large vein and its ramifications as well as the abdominal or peritoneal cavity. Organic changes of the liver may interfere with the capillary circulation of this system within the organ itself, as in the disease called the nutmeg liver, the characteristic appearance of which depends upon congestion produced

by degeneration and impermeability of the tissue. In the disease called hot-mill liver the organ is so hard as to prevent all circulation through it, and always ^{produces} abdominal ~~and~~ dropsy and often effusion into the cellular tissue.

Enlargement of the liver may interfere with respiration so as to prevent that function in a measure and thereby change the quality of the blood.

Disease of the heart also produces dropsy especially dilatation of the right ventricle which causes retardation of the blood in the veins and also prevents proper aeration in the lungs leaving the blood impure -

Scarlet fever and miasmata are sometimes the causes of dropsy in account of the state of constitution which they induce. Enlargement of the spleen in miasmatic fever may accompany the effusion because both are dependent upon

5
upon a disordered state of the blood -

Of the different varieties of dropsy
I shall describe six -

Anasarca or dropsy of the cellular tissue.
Hydrocephalus " " " " brain.
Hydrothorax " " " " chest.
Hydropericardium " " " " heart.
Ascites " " " " abdomen.

Ovarian dropsy. —

Anasarca when of a local character is called oedema -

At the approach of this disease or rather symptom of disease a swelling of the feet will be noticed, which will pit under pressure and when the body is in a horizontal position it will disappear from the lower extremity and become diffused over the whole body -

The effusion does not necessarily take place in the feet first, but is usually first noticed there on account of gravitation, for in the morning the swelling will hardly



New Haven, Feb. 11th / 1859.

Scarlatina;

By John W. Barker.

Scarlet-fever, is a disease of the same Order as that dreadful scourge of the human race, Small-pox, whose fearful ravages have from time to time almost depopulated large tracts of country. The name which Cullen gives to this interesting group is Eanthemata, a term derived from one of the most constant concomitants, or symptoms, with which these diseases are attended when well marked and fully developed, viz. a rash or inflorescence; but this is by no means the only tie that holds them in the same Order. None of them, I think, are better described in his general definition, than is Scarlatina, it is as follows; "Morbi contagiosi, semel tantum in decursu vitæ aliquem afficientes; cum febris incipiente definito tempore, apparenti phlogosæ sæpe,

Butson, says, in defining Scarlatina, briefly,
"It is a contagious, febrile disease, attended
almost always during a paroxysmal course,
by a rash and by a sore throat".

History. For a very long time it was con-
fused with Measles, at least was not known
and distinguished as a distinct disease,
at least was only made a variety of Rubella
with, rosque appended, to indicate the
difference between the rash attending it
and common Measles. But in the year
1748 Dr. Fothergill commenced the true line
of distinction, by describing the most poi-
sonous form of Scarlatina, as a distinct disease
under the name of Angina Maligna; after
him Dr. Withering carried out and fully spec-
ified the characteristic differences between
Rubella and Scarlatina. At the present
time I believe there are few if any who
doubt its contagious character, or that it
is eminently so; perhaps no contagious is
more active, or more widely diffused in its
effects, for which reason it may be, like

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a disease of children, the adults who have
escaped it during the period of childhood
occasionally become its subjects, - cases are
recorded as late as the thirtieth, or even
the fortieth year of life.

I believe it is more apt to prevail during
the fall and early winter months, and then
often as an epidemic, - but it may and
does occur at any and all seasons, but
in other than those named, I think it
is usually more sporadic in its appearance.
For the sake of convenience it has been consid-
ered by writers as presenting three varieties
Viz. Scabietina, - simplex, *S. anguinea*, and
S. paligua. The difference is only in degree,
as for example, five and six are numbers,
both of them, not the same however, yet
both of them belong to the same numerical
system, and differ only in degree, add
to one or subtract from the other, and
you have the same; so it is in the
varieties of Scabies. The question is now
ever settled by the well-authenticated fact
that the same disease may be contracted

from either of the other forms of the
disease, as for example the Malignant
form may be taken from the Anginose
and either from the simple and mild or
the distinctions, in brief, if we wish to
make them, for they gradually run into
and are lost in each other, are as
follows; It is called Scarlatina simple
when the rash and other symptoms
are present, with little or no Throat affec-
tion; Anginosa, when the rash and
sore throat are both present; while it
is Scarlatina Maligna, when the severity
and danger of the disease, have their
seat in the Throat. Of this variety Watson
says; "The epithet Maligna, marks truly
the fearful character of this form of
the Malady". As I mentioned, it is not
long since it began to be distinguished
from Measles; the differences, however
it seems to me are well marked and
easily recognized when once fixed in
the mind, the principal of which I
will mention at a future date in the beginning

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In Measles there ^{are} usually well marked catarrhal symptoms, as a cough, sneezing, running from the nose &c. &c. In Scarlatina there may be some deflection from the eyes and nose, but it usually comes on later in the disease, has a rather specific character, and does not appear till after the eruption.

In severe cases there are swellings of the glands under the jaw and about the throat not to be expected in Measles and often ulceration of the throat not expected in the last mentioned disease.

In Rubella the rash is more elevated, is of a darker color, approaching that of the raspberry, while that of Scarlatina may be compared to the shell of a boiled lobster though perhaps not quite as bright in hue. The papulae are more or less aggregated in circumscribed clusters leaving patches of healthy skin between.

In Scarlatina the rash begins on the

minute red points, which become more and more numerous till the whole body is covered with the diffused rash. The color is said to be deeper at the flexure of the joints, the groin, the popliteal &c. In Measles we do not look for the rash till the 5th or 6th day, in Scarlatina on the second; in Scarlatina the eruption on the body sometimes differs a little from that on the extremities, in the latter it is thought to be a little more like that in Measles, is more elevated, more spotted, and papular. In some cases undulating have been noticed spreading over the whole surface.

The disease commences much as the other Exanthemata begin, often with a slight chill rapidly increasing weakness, languor of body and mind and a general feeling ^{of} malaise with disinclination to effort of any kind; often there is severe headache, sometimes

sionally there is diarrhoea, from the onset. After reaction has well commenced, usually some forty or fifty hours after the first symptoms have shown themselves the eruption begins to appear; Cullen says on the fourth day and some the third, but the last's hours of the second probably is correct in the larger number of cases. The eruption is usually on the increase for three or four days, from which time it begins to fade and by the seventh has disappeared, at this time the process of desquamation begins, the cuticle from the face falls off in a kind of purpuraceous scurf, while from the extremities it often comes off in patches, while from the hands and feet an entire glove or slipper is often stripped, a fine specimen of natural glove is preserved in the Museum. In the Malay hand form the rash is often late, imperfect and sometimes the surface is lived with here and there purples

a cold, congested condition, and often
even fatally in a few hours.

In the early stage of this disease there
is an appearance of the tongue almost
pathognomonic; it is caused by the red and
exaggerated papillae, which protrude from
the congested membrane, this is called the
"strawberry tongue". There is often, at this time,
a thick, creamlike fur on the tongue,
which usually soon clears off, but in
cases that do not go on favorably, it often
dries up, as in some instances of con-
tinued fever. Unless it be the simple va-
riety and in a mild form, the patient
early complains of the neck and throat;
the glands are swelled, and on inspecting
the larynx and throat, unnaturally red,
upstrokes, and sometimes sloughing spots
are seen; the acrid matter from
the throat communicates disease to the
nose and mucous membrane of the al-
imentary canal when inflammation of these
add to the discomfort and danger of
the throat. The disease begins in the

this Hydra-headed disease may prove fatal to its victims, only a part of which I can have space to mention in an essay like this.

First, the disease may totally rob the powers of life in the fire-cure, at its onset, the nervous system seems to be overpowered, there is no apparent effort of the system, a reaction and the patient dies, in a collapse, or in more of the life generating apparatus; this is sometimes called the congestive form of the disease. At other times the patient succumbs to the intensity of the reaction, and dies directly of the fever. The patient is made lie from extensive sloughing or in consequence of abscesses formed in and about the thorax. He may be worn out by the disease, having passed through all its stages, the recuperative energy of the system may be wanting to bring the patient back to health.

The sequelae of Pericarditis, are almost all the ills that the human body is heir to. I shall only attempt the mention of a few. Permanent bad health will in some cases follow, the blood seems

venous to have been eliminated from the system and it is laid open, as it were, to glandular swellings and the various chronic forms of Scrophula. Dropsical effusions often result, coming on usually about 2. three weeks from the commencement of the disease, chronic dropsy sometimes ensues, proving fatal in the usual manner of that grave disease.

The subject is full of interest but time does not allow of a more extended period and I proceed at once to look at the recognized modes of treatment.

There has been great diversity in the methods of treating this disease, as in all others where the exciting cause is so little understood. But there seems only one safe plan to follow, in both acute, & passive, or prophylactic treatment, which shall apply to all cases and circumstances; that plan it seems to me is, to treat each case as an entity by itself, answering its own particular

The mild cases of the simple form of the disease, seem to need little else than confinement at home, and careful watching and nursing; but in these cases great care ought to be taken, against bilious and dyspeptic, for there seems as much danger of the unfortunate sequelae in this, as in the more severe forms.

When medical attention is necessary, the question, shall a cathartic be given or blood be taken? it seems to me would naturally arise; how we should refer all such questions to our maxims, viz. follow out the indications. If the bowels independent of the specific disease, seem to need a cathartic, we would give a mild one, but avoid weakening the patient by unnecessary purging. If the fever be excessive after the reaction has come on, (and in some cases I thought to be, brought by mild diffusible, or arterial stimulants, in heat and judgement we are required to know how far to go with them and when to stop. As I was saying if high fever, and delirium

but there again there is danger of making
the patient too much. In the Enginose,
form a few leeches over the swollen glands
will sometimes greatly relieve the tension
about the neck, and also the head,
and by this tension the free return
of blood is prevented; its application
to the head is often very grateful, as
well as useful to the patient. And an
emetic may be administered with benefit
on occasions. But it seems to me that the
habit of washing all epidemic diseases
indiscriminately with Corn & Thyme and
Ginger is to be deprecated and avoided;
if the indications are for them let us
use, if not withhold, for the patient's
sake. The patient is under the influence
of a specific virus which has been
received into the system probably by
inhalation; this virus sets up an
action, let us call it perlitina fermentation
if we please. Now this must have its
course, incubation, development and de-
cline, - the most that medication can do

from and aiding it in throwing off the dist^{er}
influence of the disease; to ward the
penetration and tripod of life from its en-
leth hand; watch, guide and assist through
the whole. Drink made of Nitro-Muriatic
acid, diluted so as to be grateful to the
patient, is of advantage, as a febrifuge and
alterative, also the Chlorate of Potash (a
drachm to the pint of water) is recommended
by Watson for the same purposes. The
Preparations of Chlorine seem to come the
"nearest to a specific in this disease,
their effects I have thought I might have
explanation in two ways; the disinfecting
power, Chlorine seems to possess and to
an alterative effect on the secreting organs.
Labarraque's hypochlorite of Soda solution is one
of the best forms for the internal use
of Chlorine; it may be used as follows;
Labarraque's Soln. ℥j. Simple Syrup ℥ij. Of this
after reaction, give one or two teaspoonfulls
once in two hours till the throat is
relieved and the rash disappears.
Dover's powder may be used as, circumstan-

I trophic power has been claimed
 for Radioloma and again denied; facts
 are claimed by both sides as evidence
 for and against its value. My
 own opinion is that facts are wanting
 to prove that it has any such power
 more than other things of the same
 class. Hopes have been entertained
 that the Muriated Tincture of Iron
 might have some power in arresting the
 disease. ^{My} results of experiments would
 at least go to show, that those children
 who take it in small dose & during exposure
 if not entirely protected, have it in a milder
 form than others around them who
 have not done so. Some of these experi-
 ments have been made under my own
 observation, yet I think further results
 are wanted to decide anything of this
 nature as positive. The dose given
 has been one minim (1 M.) for each
 year of the child's age given two

three times a day. It is the
 same has been used with flattering
 results during the disease given in
 Nos. 4 of from five to fifteen (1817-1818)
 Of the treatment I need speak no
 further it seems to me, unless I mention
 the application of the Nitrate of Silver
 in cases of severe ulceration of
 the throat. The means enumerated if
 faithfully used in connection with good
 nursing and Gods blessing, will I think
 save most of the little sufferers
 affected with this disease.

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Specialities in Medicine.

Division of Labor in scientific inquiries, various science by large discoveries of facts, and consequently is by no means to be disregarded or condemned. Particularly have the series of sciences collateral to medicine been profited by this mechanical system. This acknowledged truth, and its analogous illustrations in the varied departments of art and production, have of later years exceedingly influenced the domain of practical medicine. In the cycle of ages the medical world has



revolved to a condition of affairs precisely similar to that of remote antiquity.

Time was when each organ of the human body was placed in the care of a distinct medical custodian, and not infrequently when the unhappy patient died, the doctor still triumphed; "Still proved his reasoning best, and his belief, Though propp'd on fancies wild as madmen's dreams, Most rational;" because, sooth to say, the organ over which he was the presiding genius, had escaped destruction before death.

En passant, this reminds of a recent case where a modern specialist glorified and is glorified, because his probang did not transfix the tracheal facieties as was sagely believed by the patient (who died however), and two varans, of the medical sort, who attended him in extremis. On the contrary, to the utter discomfiture of anti-probangdom,

not only did the triumphant probing
not cause death, but the larynx and
trachea were wholly free from disease!
Truly, this modern coot who came so
near being sacrificed to Esculapius by the
Nestor of American Surgery and his
colleague, may vigorously crow over the
post-mortem developments. Human larynxes
and tracheas will bear a deal of swabbing
when wholly healthy, and why not
allow anxious patients the luxury,
if they can afford it?

The post-pharyngeal abscess with a post-
mortem hole in it, the emphysema, et
alii, are not within the tracheal swabbing
domain—why call upon the king
of medical specialists to invade
the territory of his neighbors?

Medicine is spotted and covered,
dwarfed and pauperised, by specialisms.
Comprehensive, profound, exact, enlarged
and true views of general practice

are too much lost sight of in the petty technicalities, the mountebank manipulations, the legerdemain tactics, the microscopic littlenesses of throat-men, skin men, womb men, eye and ear men, and so forth. Every square inch of the human body, from head to heels, is dotted over with medical homuleuli, wedded in heart and soul to their particular square inch, and knowing nothing, caring nothing for the man as a whole.

And this is but the direct result of pandering to a gross popular error, which judges of practical medicine as it does of practical pin-making - much to be facilitated by division of the processess. And yet, if there is any one truth established by all medical experience and all medical philosophy, these truths are established beyond reasonable cavil.

There is no man who knows so little of the correct treatment of the human eye as the professed oculist. There is, in like manner, no man so deplorably ignorant of the human ear, as the "aurist". There is no man so dangerous to the integrity of the human windpipe and its appurtenances as the "throat man". There is no man so prolific in mischief to the fairer portions of the race as he who displays, as the peculiar badges of his ministry, the speculum, the porte caw-tique, the sound, and the multifarious pessary.

And the catalogue might be extended indefinitely. A large proportion of this unmistakable ruckery has grown up insidiously within the sheepfold of the profession. The magnates have eaten of it to their own rejoicing of pocket, and the tender lambs of



the flock nibble assiduously at the promising grain, being fully persuaded that they shall thereby be enabled to wax fat and, in their turn, kick lustily at all "irregulars"—outside the pale *delicium vitium*.

Whatever excuse might have formerly been afforded for an attempt at division of labor in the practice of medicine, however attractive seems the opportunity, the great light, which has of late years been thrown upon the intimate relation existing between the most remote parts of the human body, now utterly dispels the illusion. No man who understands the full import of comparatively recent discoveries can now fail to see that an attempt ~~to~~ separate treatment of any single part of the body from a complete knowledge of the method of treating the whole, however diseased,



is like a man's attempting to light a single burner, when the whole supply pipe is shut off at the meter. It may burn a little, a timid flickering ray or two, enough to show how dark the surroundings are, but speedily it is gone—precisely as the travelling specialists do, burning out the supply in their little pipes, and then places which have known them know them no more forever.

It is to be feared that much of this specialism has grown out of sheer indolence. Acquaintance with what inquiries in special departments of medical science have brought to light is imperatively necessary to the conscientious medical practitioner, and it is quite a relief to have some propounders of smooth things say that it is better to devote attention to what observers in one department only bring forward. But

he only is a reliable practitioner who has drawn from every well at whose bottom Truth is - who has thoroughly grounded himself in the lore of experience, and the wisdom of research in all science.

This idea is not novel - it is as old as Bacon. "In particular sciences we see, that if men fall to ~~subdivide~~ their labors, as to be an oculist in physic, or to ~~be~~ perfect in some one title of the law or the like, they may prove ready and subtle, but not deep or sufficient, no, not in that subject which they do particularly attend, because of that consent which it hath with the rest." ----- I mean not that use which one science hath of another for ornament or help in practice, but, I mean it directly of that use by way of supply of light and information, which the particulars and instances

of one science do yield and present
for the framing or correcting of
the axioms of another science in their
very truth and notion".

Refer now to the flood of light
which is being thrown upon the con-
nection of remote parts of the human
body, by the ingenious application
of the newly-discovered laws of nervous
action, to the elucidation of previously
occult phenomena. The physiology of
metastasis, now as clearly discoverable
as the physiology of digestion. The
epilepsy supplanting the disease which
long baffled the "Skin man". The
phthisis, which rewarded the efforts
of the "Osuteri man", and so forth,
and so on, to the end of the categories.

One blood percolates all capillaries—
one nervous system is webbed in and
over every organ, every tissue. Take
away every thing else, and the nervous

fibers and vessels wrap out the entire man. And yet, with these all-pervading elements, comes the specialist, and rejoices, like Marius at Carthage "alone amid ruins" that he can yet play manifold tunes upon his keyless, valveless trumpet.

10/10

11/11 2011
→
End to end
out of phase

Thus it is split up and scattered
over the lumbar, then caution is
required not to wound the sym-
physis and duct.

Internal Hernia.

This is most frequent in fem-
ales. The protrusion takes place
through the osseous opening of
the thigh on the inside of the
sacrotal vessels and nerve, and
the cath protrudes a sac which
is formed by the folding of
the tendon of the external
oblique muscle forming a bag
what is called the cough sack
for the passage of the vessels and
nerves.

Protrusions of Internal Hernia.

They will little resemble those of
inguinal Hernia in appearance,
but in applying Taxis to this
form of Hernia it should be

Borne in mind that the
tumour is bent upon itself
by being checked from descending
by the growth of the vessels, which
is nothing more than a contin-
uation of the sacra transversalis.
The position of the patient is
the same as for reduction of
inguinal Hernia, except the
limb of the affected side should
be flexed at the hip joint and
carried across the limb of the
opposite side in order to relax
the falciform sacra or ligament
of the crural arch. Therefore the
tumour is to be pressed down-
ward and then upwards to be
returned. Femoral Hernia is
more often strangulated than
Inguinal and more difficult
to be reduced by taxis consequently
more frequently requiring the

operation. This is performed by making a T, shaped incision, the horizontal incision along the lower border of Douglas's Ligament then carry the other downwards at nearly a right angle with it across the body of the tumour then divide the fascia as before directed in the Inguinal form. The stricture may take place at three points in the ^{upper} canal, ^{upper} Hernia at the crural arch at Pambornant's Ligament, or, in the neck of the sac. The incision for dividing the stricture are to be made in the same manner directed in the Inguinal form.

But should not be carried any farther than just to relieve the stricture, for if the obturator artery arises as it does some times, by a common trunk with the

perforated after it would be
likely to be wounded.

Umbilical Hernia.

This form is most common
to infants though women that
have born many children are
frequently subject to a protrusion
in this region, but it is very
seldom that through true umbil-
ical ^{reg.} Hernia occurs at adult age.

This may be congenital but
usually occurs from carelessness,
on the part of the attendance
of the child, from not properly
supporting the abdomen. When
crying the bowels burst through
the ununited parts and protrude.

But this may be easily cured,
the tumour being small and
by a proper applied compresses
and strips of adhesive plaster
to retain it a permanent cure

is expected. But in the adult it is not so easily managed for the tumour sometimes attains an enormous size in spite of the best efforts of the Surgeon to prevent it; generally the treatment is but palliative. Strangulation is not so frequent as in other forms of Hernia but if it does occur it may be treated in the ordinary way, by taxis and by operation the incision should be made in the linea alba if adhesions do not prevent it.

Other varieties of Hernia.

These have various names according to their anatomical relations of parts concerned. Ventral Hernia is that form which takes place at the front or side of the abdominal parietes except the navel and inguinal regions

And Perineal union the cord
descends between the bladder and
rectum and presents a tumour in
the perineum. Cystical in the
female when it bulges into the vagina.
Diaphragmatic when protruding
through the diaphragm. Oschiatic
when in the Oschiatic notch.

And obturatorial when protruding
at the foramen osae and so on
as many more as there are differ-
ences on the subject of Hernia.
But very fortunately for the
Surgeon these varieties are not
very common, for they are very
difficult to diagnosis. But it
is not necessary to speak any
further, I am only so thank
you for your patience, and, by
you to excuse me for so long
occupying your time.

L. H. Alling.

The Knife used should not be very sharp for it is easy to separate the tense part causing the stricture. And if the knife is dull it would not be so apt to injure the elastic coats or the vessels if it should come in contact with them. Sometimes it may be necessary to remove a portion of omentum. This may be done by passing a ligature through it above the point of stricture and securing it; then removing the inflamed portion. When the protruded parts may be returned if the intestine has not lost its smooth and shining appearance, and if it shows no signs of gangrene it should be returned at once. But if it be gangrenous it should not be returned. But it may

be opened at once and allowed to discharge the feculant matter and gases if there is much distention, or, if not so active treatment need be adopted and the patient be left to recover with an artificial anus, in either case if recovery takes place at all.

^{ing} Treatment after the Operation.
The patient should be kept on the back and the wound ~~approx~~ approximated by sutures, the depending angle of the wound left open for serous exudation, avoiding all pressure that will be liable to create inflammation.

Inguinal Hernia.

This is of two kinds, Oblique and Direct. In the oblique form the intestine escapes into the spermatic canal at the

internal abdominal ring which is situated about midway between the spine of the pubis, and the anterior superior spine of the ilium and half an inch above Poupart's Ligament. This canal is about one and a half inches in length terminating in the external abdominal ring, this is formed by a separation of the tendon of the external oblique muscle over the spermatic canal forming what is called the two pillars of the ring. The internal is inserted into the spine of the pubis while from the under portion is sent off a slip of tendon which is inserted into the pectineal line this is called Gimbernat's Ligament.

At this opening there is, a firm fascia stretched across this ring



which forms one of the coverings
of *Prunellæ* *Flaccida*, thus is
called the intercolumnar varix.
As the *Prunellæ* descends the
cavity of the abdomen it comes
to the point where the sperm-
atic ~~cord~~ escapes through the
internal abdominal ring and
meets the *vasa deferentia*
which it carries before it. There
soon meets with the external
muscle covering a covering from
that also passing on to the external
ring where it then protrudes with
the intercolumnar *vasa* in
the form of a tumor. This is
the most frequent form of *Prunellæ*
in the male, it may protrude
to any extent reaching
from the groin to the
middle of the thigh varying
very much in size.

Oblique, Inguinal, Hernia.

May be congenital, this takes place where the internal aperture of the inguinal canal is not closed at the time of birth, and where the child in the act of crying brings down the bowel through the opening of the peritoneum. But this differs from the preceding form only in its coverings there being no true hernial sac but it is contained in the tunica vaginalis in contact with the testicle.

Direct Inguinal Hernia.

Here the bowel breaks through the ^{external} abdominal ring and protrudes, the internal ring having no connection with this form.

Inguinal Hernia, ^{affixi} ~~fixi~~

May present any of the pathological conditions that have been des-

scribed and the treatment must
be varied accordingly, to suit
the different conditions. And
when necessary the operation must
be resorted to. This consists in
making a straight incision
through the integuments then
dividing the fascia as before di-
rected till the sac is reached.

Stricture may exist at three
places in, Inguinal Hernia.
At the External aperture, or
internal, or, in the neck of
the sac itself, or, at all three
of these points. In dividing
the stricture the incision should
be made upwards and parallel
with the axis of the body, so
as to avoid the spermatic artery.
The position of the spermatic
cord should be ascertained so
that it may be avoided for some.

spasm and extensive adhesions.

Treatment the same as for the irreducible form of ^{up}Hernia.

Strangulated ^{up}Hernia.

This is the most dangerous form that we are called upon to treat and it is important that it should be understood. By Strangulation is meant such a state of the tumor as to cause the death of the part involved by inflammation, & mortification, if relief is not soon afforded. The circulation being entirely suspended and the intestinal canal becomes impervious at this point; if the Hernial sac contain intestine. Causes that may induce strangulation have been already named and I will not enumerate them. But only remark that a recent ^{up}Hernia is more liable to strangulation

than one of long standing for
in the old Hemia the opening
is large and the parts do not
take on inflammation so readily
as where there has been laceration
of parts. Symptoms. The
pain in the intestinal canal
about the region of the umbilicus
simulating those of Colic, nausea
and vomiting, pulse at the outset
quick and hard, with paleness of
the skin all of these symptoms
may be present before the tumor
becomes tender. But if the str-
angulation is not relieved all of
the symptoms will increase
in severity, the pulse becomes
thready with profuse perspiration,
the tumor becoming tender and
the tenderness extends more or
less over the abdomen. The parts
becomes of a livid hue and then

The patient begins to be eased from pain. This we must regard as almost a fatal symptom, though the patient may recover from this state with an artificial anus, though if the sac contains simply coagulation the symptoms will it is said, be less severe and the termination more favorable.

Treatment varies according to the nature of the case, if the tumor has become tender when the Surgeon is called to the patient very little good may be hoped for by any means that are named in the Books but the operation.

Though an effort may be made the operation should not be long delayed for as some writers have remarked that the delay of the operation has more often produced a fatal determination than the

operation itself. Therefore I should think that the operation should be advised early so that if other means fail it may not be delayed. But if the surgeon is called to the patient in season other and milder means may be employed, by manipulation which is called taxis. That is to grasp the tumor with the fingers and endeavor to empty the sac of its contents by pressure, and then return the protruded bowel. But in the first place we should find the exact point at which the part escaped so as to make pressure in the right direction, and then place the patient in such a posture as to relax the muscles concerned in producing strangulation. Various other means have been employed for this purpose

as auxiliaries. Amputation, Warm,
Bath, Antimony, Tobacco, enem-
ata Opium, Purgatives. Cold to
the tumor &c. But since the
discovery of the ~~anesthetic~~ agents
these means have been but a
little employed for they produ-
ce a more perfect relaxation than
any other means that have been
devised. Then if we do not suc-
ceed by pressure and some other
means that may be at hand to
produce the desired relaxation,
we should place the patient under
the influence of the anesthetics
at once and then proceed with
our fingers, if then we fail the
cutting operation is the last resort.

Operation for Strangulated Hernia.

The particular manner of making
the incisions, will be spoken of in
connection with the different varieties

to be described. The integument
having been turned back the adipose
substance and layers of fascia are
to be picked up one after the other
and divided by a horizontal stroke
of the knife. The fingers are the
best instruments for raising up
these fascia when they can be
used. Then the ^{help} good director
should be introduced and the
incision enlarged to a sufficient
extent to reach the point of stric-
ture. This is to be divided by
passing the director under the
stricture point, and then using
a blunt pointed bistoury along
the groove of the director until
the cutting edge comes in con-
tact with the stricture point,
then by separating the handle
of the knife from the director
the stricture is divided.

contain intestine, but when the tumor is entirely omentum it is of an irregular shape and done by feelings to the fingers of the surgeon. By continuing the pressure in the examination of the neck of the tumor we can usually feel very distinctly the internal abdominal ring through which it passes. Careful attention to the accompanying symptoms will in most cases enable us to arrive at a correct decision of the true cause of the difficulty. But there are other affections which may be mistaken for ^{upper} Hernia.

Hydrocele, may simulate the inguinal form of Hernia, but may be generally distinguished by its transparency while Hernia is almost always opaque.

20.
"Cancer" is a constant tumor
while Hemorrhoids will disappear on
pressure and Cancer is more
rarely bent at the neck than
Hemorrhoids. But unfrequently however
Hemorrhoids and Cancer coexist.

The tract of the spermatic cord
may be mistaken for this affection.
But the absence of all the ordinary
signs of Hemorrhoids except the pres-
ence of a tumor unless this slight-
ly extend through the internal
abdominal ring into the cavity
of the abdomen then the diagno-
sis may become difficult. Varicose
state of the spermatic veins are
sometimes mistaken for Hemorrhoids
but the peculiar feeling of
enlarged veins under the fingers
like a bundle of earth worms
will detect the nature of the
disease. Bubo has been taken

for Hernia, but the history, progress, form, and, feeling, and character, of the patient will usually enable us to make a distinction between these two affections. The testicle has been retained in the spermatic canal and then been mistaken for Hernia, and, treated for that disease by applying a truss to the great discomfort of the patient, but it does not seem to me that an intelligent Surgeon can make this mistake with both eyes open.

Reducible Hernia.

The testicle inguinal variety of Hernia is most apt to be reducible. This form is that in which the protruded parts can be returned. This form often exists for a long time without much inconvenience to the patient.

but not without danger unless
protected and supported from
violence by a trap. For it is
liable at any moment to become
strangled or injured and dis-
tress the patient. This form of Her-
nia is not dangerous but if left
to itself it will continually drag
upon and enlarge the opening
until the tumor reaches an
enormous size. And by too
vigorous exercise of the patient
it may be liable to all of the
fearful consequences before spoken
of. Treatment, consists in sim-
ply replacing the protruded bowel
and binding a compress over the
opening through which it has
escaped. Then by a strong and
firm bandage carried around
the body or by some of the
various apparatus that have been

desired. For this purpose, the parts are kept in their natural place.

But if the Hernia be recent and the patient young and vigorous and can be placed on the back for a few weeks and a truss be nicely fitted to it - we may hope for a radical cure. But the truss should be worn for some time until firm adhesions have taken place. This form of Hernia has been treated with success in some instances by various means, by scaton injections scarification &c. Means calculated to bring about adhesions of the parts concerned.

Irreducible Hernia.
Is that form that cannot be reduced without doing violence to parts this may happen from many causes, from adhesions of the sac to the surrounding parts or

by the intestine being protruded in a relaxed condition and afterwards becoming distended. This form of Hernia may exist sometimes without causing much trouble, but it should always be protected with a suspensory bag or a constricted truss that will keep up steady and uniform pressure to prevent further protrusion and protect it from external violence.

Incarcerated Hernia.

This consists in a portion of intestine included in the sac being so gorged with fluid or flatus that it cannot be withdrawn or reduced without doing violence to parts. And without very materially obstructing the local flow and without inflammatory action. This state is mainly dependant on muscular

Summary, 1890-1891

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1. 11 (10)
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2.
Hernia.

The selecting this important subject I am well aware of my utter inability to interest or instruct you, in the proper consideration of a subject upon which there has been so much written, for volume after volume may be found upon the subject of Hernia.

I shall not attempt to advance anything new or enumerate half that has been said or that may be found in the Books upon an accident so frequent in its occurrence so important from the nature of the parts involved, and so often fatal from the consequences in which it results. But shall endeavor to give us practically a description of the subject

as I can and comprehend in
a few words as much as possible
to communicate to you the in-
structions that I have received on
this subject, from our ¹⁴Worthy
Prof of Surgery (and those associated
with him) which as been so
plainly and faithfully imparted,
and, to them and, them alone
does the merit belong, and I
alone ought to be answerable
for the faults in this description.
But I trust if I omit some
important points in describing
the Anatomy, Causes, and
Treatment of the different varieties
of Hernia and pass over others
without giving them due consid-
eration I hope you will require
no apology.

By Hernia is understood
a protrusion of any viscus naturally

contained in a cavity, but the term is usually limited to the most frequent form of such protrusion namely that from the cavity of the abdomen. I shall not endeavor to describe all the varieties of Hernia, but speak of the most frequent forms, and the most important distinctions between the different forms speaking first of some of the most frequent pathological conditions.

Causes of Hernia, — are predisposing and exciting, the predisposing are whatever weakens the abdominal parietes at any point, want of closeness in development as at the groin and marks rupture of muscle and fascia at any part as in parturition, bruises penetrate wounds &c. Exciting causes are



coughing, straining, or habitual muscular exertion of any kind as in urinary complaints of old men. Generally the most movable viscera are most liable to protrusion. Hence the omentum and intestines, which, are not firmly fixed in the abdominal cavity are most frequent in the Hernial sac, but the sac may contain any of the viscera of the abdomen.

Coverings of Hernia vary very much in different patients and in the different forms, and are seldom exactly the same in any two cases.

In all cases of ordinary Hernia there is first the integument and then four or five layers of fascia. But these vary very much in number for. Prof.

Charles Cooper mentions a case where in operating the divided tunic or ^{thick} fascia before reaching the Hernial sac, and in another operation he did not find but one or two fascia. The sac is sometimes uniting in Hernia following directly upon a wound and in the congenital form of the disease. When the sac is once formed it generally remains and becomes adherent to the parts around, though at any new protrusion it may become enlarged to any extent. But if the neck of the sac has become firm and will not yield and a fresh protrusion takes place the part may become strangulated and require the interference of the surgeon

for its relief. Diagnosis. —

It is of the highest practical importance that a correct diagnosis should be made out at the first visit to the patient that efficient means may be employed in season.

This is done by various ways first the history of its appearance its situation size shape and form, by the impulse communicated to the hand of the Surgeon when placed upon the tumor, and the patient is made to cough, by its disappearing when the patient is in a recumbent posture if it is of the reducible form of Hernia. And when the tumor is compressed it is accompanied with a gurgling sound if the sac









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